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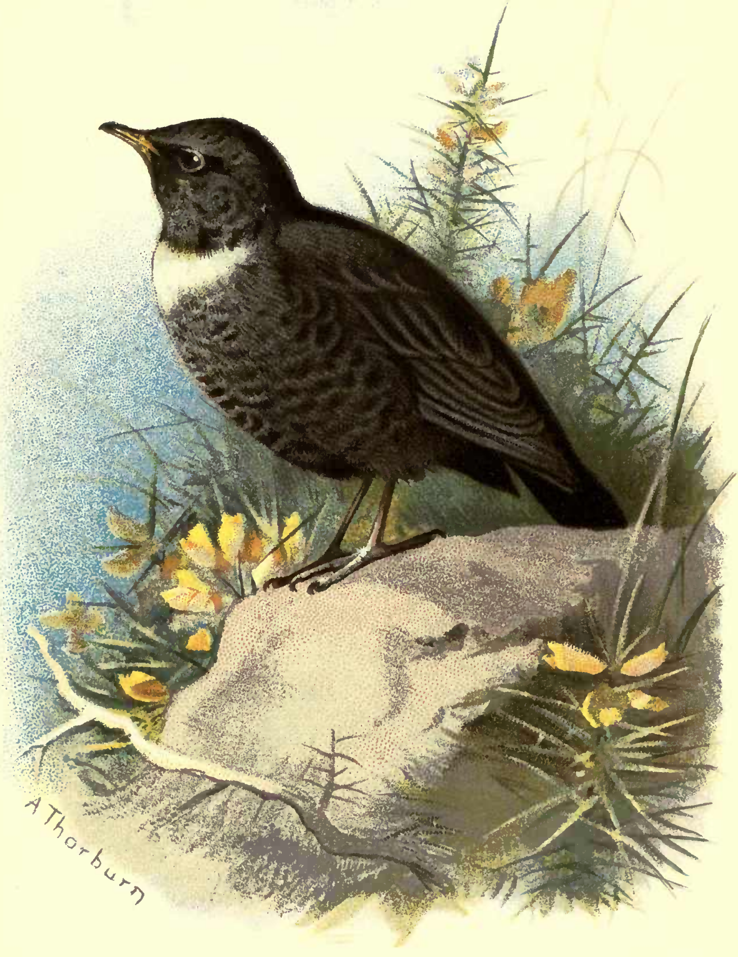
FAMILIAR WILD BIRDS



RING OUZEL.

(2/5 NATURAL SIZE)

FAMILIAR WILD BIRDS

BY

W. SWAYSLAND

Fourth Series

WITH COLOURED PLATES

CASSELL AND COMPANY, Limited
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LA BELLE SAUVAGE

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PREFACE.

THIS concluding volume of "FAMILIAR WILD BIRDS" contains still more examples than its predecessor of birds which are, alas, "familiar" no longer. May it prove, perchance, that to make some of these now rarer denizens of Britain better known is to secure for them some better protection from that final extinction which has already overtaken not a few; and may this attempt to convey some idea of the wonderful variety of bird-life help to promote the loving study rather than the total destruction of those "wild birds" that remain.

To a General Index is added, at the request of many subscribers, a classified scientific index of the birds described in all the four volumes, arranged according to the most recent system.

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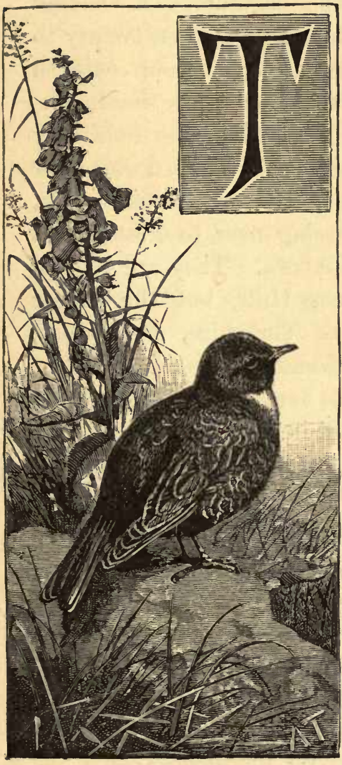
FAMILIAR WILD BIRDS.

THE RING OUZEL.

Merula torquata.



THE RING OUZEL, or, as it is variously called, Rock Ouzel, Mountain Ouzel, White-breasted Blackbird, Ringed Thrush, and Moor Blackbird, is a frequenter of the wild, mountainous, and waste portions of Great Britain. It does not appear to care at all for cultivated or inhabited districts; and although by no means a scarce bird, its habits of life are so shy and retiring that few persons excepting the naturalist know very much about it.

The Ring Ouzel is a migratory bird, arriving in this country about the end of March or the beginning of April, and remaining with us until the end of October. It is found during its stay principally in the northern and western extremities of our island, but Hampshire, Dorsetshire, Devonshire, Cornwall, Kent, Surrey, Suffolk, Norfolk, and Sussex may be mentioned as counties where it is to be met with. It is, however, as already intimated, a lover of the "mountain and the moor," and its scarcity increases just in proportion as these geographical characteristics are few and far between.

For about a fortnight in the beginning of October these birds may be seen in flocks, varying from twenty to thirty, in many places along the coast-line of our southern counties, notably near some of the Devonshire headlands, and in the Island of Portland (where they are familiarly spoken of as "Michaelmas Blackbirds"). These flocks, after remaining near the coast for twelve or fourteen days, suddenly disappear, doubtless passing over to France, and thence to the northern part of Africa. They are said to breed regularly on the Dartmoor Hills, but the higher moorlands and hilly districts of Yorkshire, Derbyshire, and Scotland are their most commonly used breeding grounds. The Ring Ouzel is also found in Wales, Ireland, and various parts of Scotland, and in some of the European countries, particularly Norway, Denmark, Sweden, and Switzerland.

The food of the Ring Ouzel consists of insects, small snails, seeds, berries—especially those of the elder, juniper, holly, and mountain ash; the bird occasionally displays a strong partiality for grapes and fruit of various kinds, and when there happen to be fruit gardens within reasonable distance of its haunts it frequently becomes a persistent and unwelcome visitor. This characteristic is most noticeable after the young birds have to provide for themselves.

The nest somewhat resembles in structure and material that of the Blackbird, being composed of coarse dry grass and stalks, plastered on the inside with mud, and lined with finer grasses and stalks; it is placed sometimes on the ground and sometimes on the face of a bank, but nearly always either under a bush, or close to the shelter of some tuft or fragment of stone or rock.

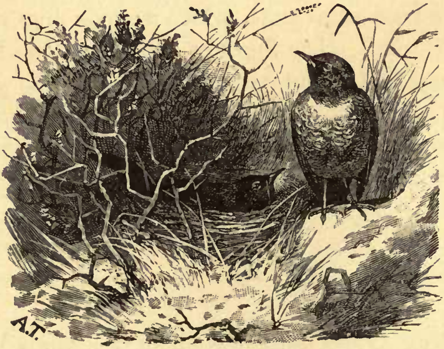
The eggs vary in number from four to six: they are oval in shape, of a pale bluish-green colour, speckled with pale reddish-brown, the larger end having the spots much longer, and frequently running into one another.

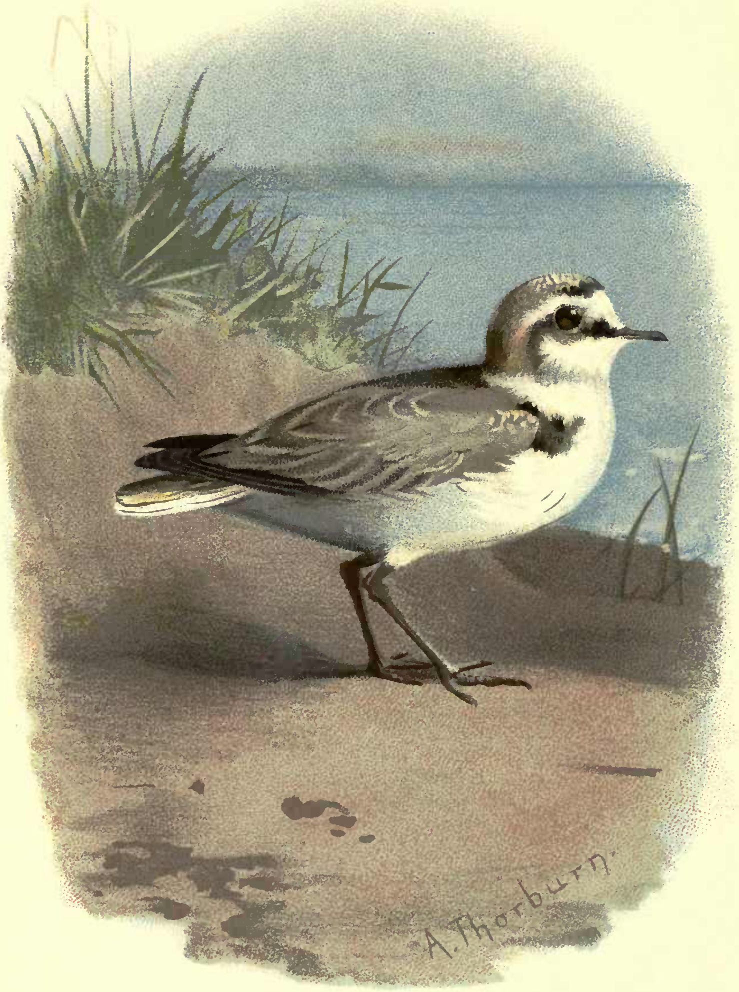
In its general appearance the Ring Ouzel strongly resembles the Blackbird, especially in the making a chattering cry when alarmed, although the note is different. It is cautious, shy, and vigilant; the flight is strong and rapid. When disturbed, the bird will endeavour to conceal itself amongst the bushes, but if forced to take wing it commonly flies off at once to some considerable distance, repeating a loud clear note, which sounds like the syllable "tak" or "tuk." The flight of the Ring Ouzel is usually at the height of about twenty feet from the ground; it rises from the heart or top of a tree or bush, and continues its movements at the same elevation. They do not visit low bushes and shrubs like Blackbirds.

The song consists of a few clear plaintive notes, described by Morris as being "desultory, but sweet"; the bird is said to sing all the year round, except during moulting.

The Ring Ouzel measures about ten and a half inches in length, the tail being nearly four inches long; the beak is black, with a variable amount of yellow at the base; the irides dark brown; the head, neck, back, upper tail-coverts, wings, and tails are all of a brownish-black colour, while the chin, throat, breast, and belly are similar in colour to the upper portions of the body. Each feather is slightly edged with light, which gives the bird a scaly appearance, but across the chest there is a broad curved stripe of white, edged with brownish, from which the bird derives its name. The legs, toes, and claws are brownish-black.

The female is not so dark in plumage as the male; the band across the breast is not so broad, it is less pure in colour, and shaded with reddish-brown and grey. The young male birds resemble the adult females in their markings; but in the young females the crescent-shaped band is hardly perceptible.

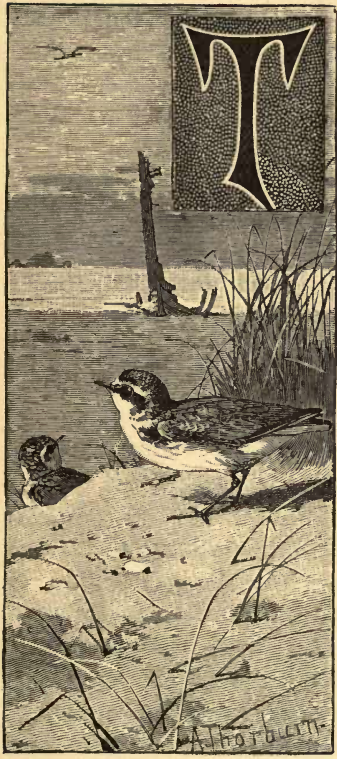




KENTISH PLOVER.
(½ NATURAL SIZE)

THE KENTISH PLOVER.

Charadrius cantianus.



THIS pretty little Plover has been known to naturalists as a British bird for about a century, the first recorded specimens being secured in 1787 at Sandwich, in Kent. Since that time, however, the bird has been noticed in several of the English counties, though its partiality for the county first mentioned is still sufficiently marked to afford ample reason for the continuance of its name.

The Kentish Plover is migratory in its habits, arriving on our shores about April or the beginning of May, and remaining until August or September. The broad, flat, shingle-covered shores of Kent and Sussex, especially the former, and the extensive tract known as Romney Marsh, are localities which are much resorted to by these birds, and here they breed in large numbers.

Mr. Yarrell says that when visiting Hastings in 1833 he was informed that the eggs of the Kentish Plover were in great demand as a table delicacy, and that dogs were trained to find them for the collectors.

The Kentish Plover takes no trouble to construct a nest, a slight depression or hollow in the shingle or sand being considered all that is necessary. As a rule, four eggs are laid; they are about one inch and a quarter in length, the grounding of a pale yellowish stone colour, marked all over with streaks and spots of brownish-black, the markings being thicker around the base.

The bird is seldom found on the nest, for, like all its tribe, it runs directly it is approached, and does not take flight until at some distance from the nest.

The eggs may easily be found if the bird is watched through a good field-glass.

The food of the Kentish Plover consists principally of marine insects, crustacea, and worms. These birds associate frequently with Ring Plovers, and feed freely with them; on these occasions, however, if disturbed and put to flight, the Kentish Plovers invariably keep in a flock by themselves.

It has been already noticed that these birds frequent the sea coast, and it is only in exceptional cases that they are seen on the banks of rivers, as is the case with the Ring Plover. Occasionally, during very high tides or violent gales of wind, they retire to the fields or low-lying marshes contiguous to the coast, but only for a short time.

When the bird is alarmed it has a very noticeable habit of running some little distance with its wings opened high above its back before it takes wing, and it repeats this action when alighting after flight.

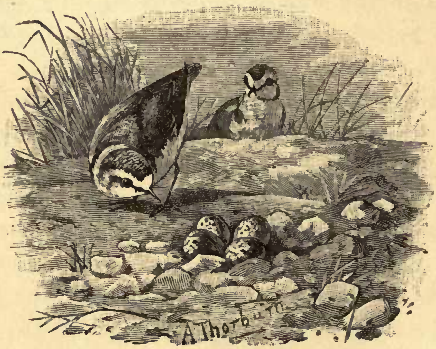
The note is short, and may be said to resemble the syllables "tirr, tirr," "pitt, pitt," "pwee, pwee."

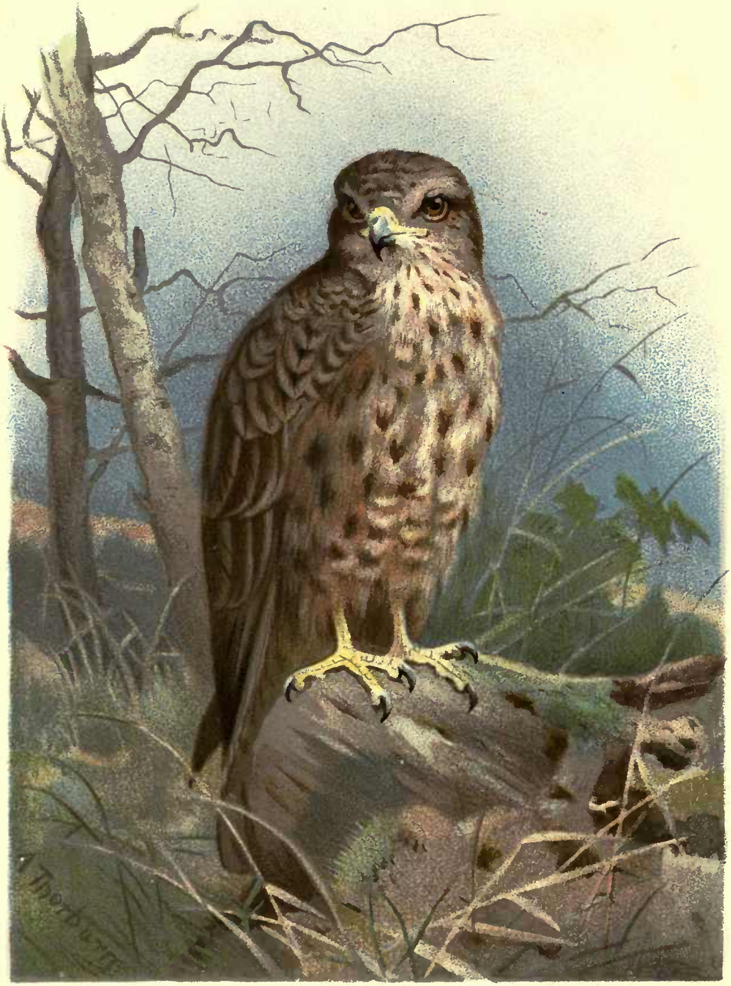
In common with most birds of the Plover tribe, the Kentish Plover exhibits great artfulness in endeavouring to decoy unwelcome intruders away from her nest, running along on the ground, fluttering about in short and apparently feeble flights, and continually uttering short sharp cries—indicative of uneasiness and alarm. The young birds begin to run almost immediately they are hatched, and at this period the parents are extremely solicitous for their safety.

The entire length of the full-grown bird is about seven inches and three-quarters. The male in summer has the beak black at the point, and orange-yellow at the base; the irides brown; forehead white, with a black band reaching to the eyes on each side; lore, space under the eyes, and ear-coverts black; below this, and all round the neck, is a collar of white, and then a collar of black; the top of the head and back of the neck is yellowish-brown; the back, wing-coverts, and tertials are brown; the wing-coverts are tipped with white: this marking forms a continuous white bar, which is very conspicuous during flight; the primaries nearly black; upper tail-coverts and base of tail a "hair" brown, merging into greyish-black towards the end; the outer feather on each side of the tail is pure white; chin and throat white; breast, belly, and vent white, also the under tail-coverts; legs and toes orange; claws black.

Adult females in summer have the bands and collars narrower than the males, and the entire plumage is duller and less decided. In the winter months the markings of both sexes are not so distinctly defined, the black and white parts being less pure and more intermixed.

Young birds have the beak all black, or very nearly so; there is no black band over the forehead, the collar round the neck is a dusky brown, and the legs are pale yellow.



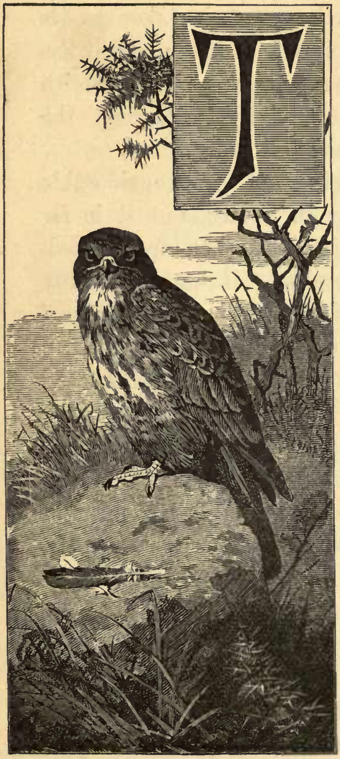


BUZZARD.

(⅕ NATURAL SIZE)

THE BUZZARD.

Falco buteo.
Buteo vulgaris.



THE Common Buzzard, although not nearly so numerous in the British Isles as in former times, is still one of the most familiar and best known of the larger hawks. It frequents those counties in which the most densely wooded districts are found, and, unlike many of the Falconidæ, it is but seldom met with in very open or exposed situations. Large numbers of Buzzards remain with us all the year round, but in many cases they are partially migratory.

The Buzzard is certainly inferior to many of the hawks in its general characteristics. The flight is more laboured, the movements are slower, and the courage, daring, and dash which is noticeable in other members of the family are "conspicuous by their absence." This is probably due to its more secluded habits.

The food of this bird is somewhat miscellaneous, and includes rabbits, moles, birds, and reptiles. It prefers watching for its prey from some advantageous look-out, such as a prominent bough or some projecting crag, and it will remain in such a position for a considerable time, exhibiting meanwhile the most commendable patience. When hard pressed by hunger, however, it takes to its wings, and sails slowly along in search of food; and it has been noticed that these flights or beats are repeated with tolerable regularity, the bird generally exploring the different parts of its circuit in the same order.

The Buzzard is occasionally observed at a considerable height in the air, slowly sailing in circles, but it is far more commonly stationed in a tree, and when approached, to quote the Journal of a Naturalist, "it bustles hastily out with a confused and hurried flight, indicative of fear."

The nest of the Common Buzzard is as a rule built in the forked branches of a tree; it is composed of sticks and twigs, and sparingly lined with wool, moss, or any other soft material. If the bird can find an old nest of some other large bird it makes use of it in preference to building one for itself. In the more wild and mountainous parts of the country the Buzzard builds in tall crags, crevices in the rock, and ledges in the cliff; in all these cases great care and caution are shown in selecting places tolerably secure from molestation and annoyance. The eggs vary in number from two to four: they are more round than oval, and differ in colour; some are quite white, and others are a dull bluish or greenish-white, blotched and streaked with pale yellowish-brown.

The Buzzard pairs in the early part of spring; the parents show great attachment to their offspring, and are said to associate with them for a much longer time than do most hawks.

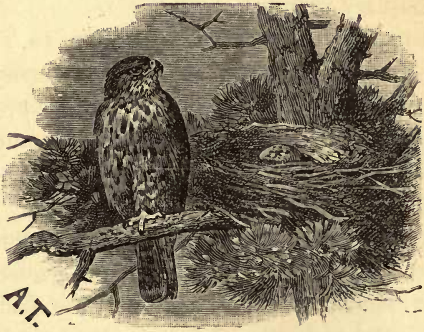
The note of the Buzzard is a wild shrill scream; this has doubtless originated one of its local names, viz., the Shreak.

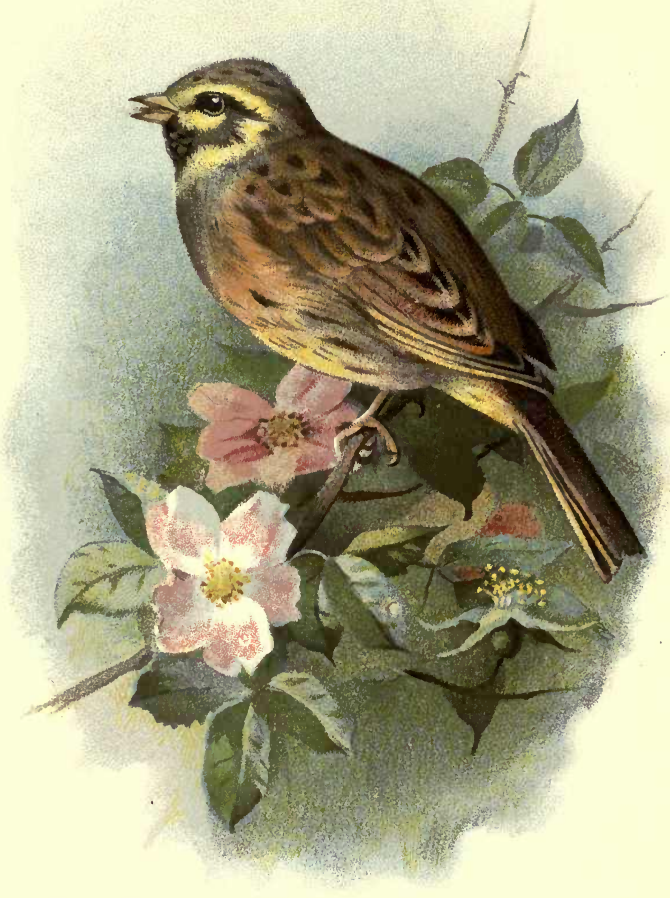
In confinement the Buzzard exhibits very little ferocity, and soon becomes tolerably familiar and attached. It readily undertakes the duties of incubation, and instances are recorded in which a captive Buzzard has brought up a brood of chickens, and behaved to them in a most affectionate and exemplary manner.

The plumage of this bird is subject to considerable variations, scarcely any two specimens being precisely similar. The feathers fade and grow dull before moulting, and in some cases the bars on the tail are the only distinct markings left. The females are larger than the males, and frequently darker in their general appearance.

The entire length of the male is about twenty or twenty-two inches; the beak is bluish-black, growing darker towards the point; the cere yellow; the irides yellow; the upper part of the head and cheeks are pale brown, with longitudinal streaks of a darker shade; the whole of the back, wing-coverts, upper tail-coverts, and upper surface of the tail feathers are dark clove brown, the last-named being barred with a lighter brown; the former-named parts have lighter coloured edges; the wing primaries are brownish-black; the chin and throat almost white; front of the neck, breast, under wing-coverts, belly, and thighs greyish-white, spotted and streaked with yellowish-brown; under tail-coverts white; under surface of the tail feathers is barred across with dark wood-brown; legs and toes yellow; claws black. The texture of the feathers is much softer and more owl-like than in the rest of the Falconidæ.

In addition to the places already mentioned, the Buzzard is well known throughout all the wooded parts of Europe, and it is said to be met with in North Africa and North America.



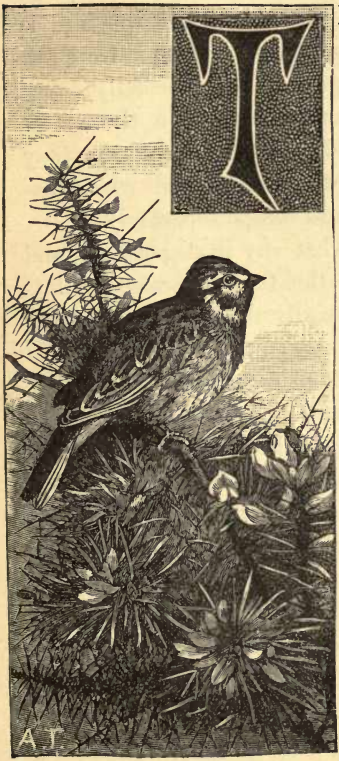


CIRL BUNTING.

(3/5 NATURAL SIZE)

CIRL BUNTING.

Emberiza cirlus.



THIS handsome little bird has a strong general resemblance to the Yellowhammer, and no doubt is frequently mistaken for that bird, especially if it happens to be a female, in which case the similarity is the most strongly marked. Any close observer may, however, easily distinguish these birds from one another, as the male Cirl Bunting has a black throat, and both the male and female have the rump feathers of a pretty olive-green. Neither of these markings are found in the plumage of the Yellowhammer.

The Cirl Bunting is said to be met with abundantly in all the southern parts of the European continent, whilst in our own islands it has been met with at times in nearly every portion, but most plentifully in the southern counties, and more especially in Sussex, Hampshire, Wiltshire, and Devonshire. Mr. Knox remarks that, although commonly seen in the summer months in the neighbourhood of Brighton, Worthing, Bognor, and Chichester, it is seldom met with far on the northern sides of the South Downs.

Corn-lands, meadows, and open fields surrounded by hedgerows are the favourite resorts of the Cirl Bunting, and in counties where there is a sea coast the bird is generally found to keep at no great distance from it. They are seldom found in large numbers; usually small parties of about from six to ten are seen. In the winter they keep together in grass fields, or on waste land; they seldom associate much with other birds, and when disturbed rise one after the other and escape separately.

The Cirl Bunting is somewhat shy in disposition, and much addicted to perching on the tops of trees, exhibiting a partiality for elms, especially during the breeding season.

The food consists of the seeds of grass and other plants, caterpillars, flies, and various small insects. As a vocalist, it certainly cannot claim a very high rank, the song, if it may be so termed, consisting of a few shrill, almost harsh notes, generally uttered whilst the bird is perched on the summit of a tree, and sometimes during flight. The female is less accomplished in this particular than her mate. The call somewhat resembles the words "twit, twit." The flight is undulatory, and very similar to that of the Yellowhammer.

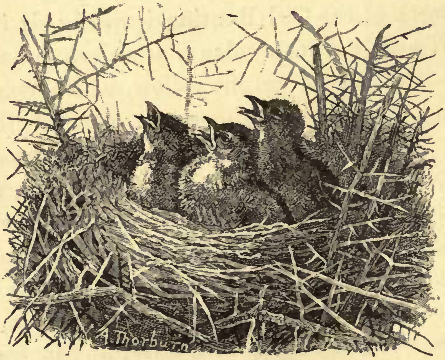
About the beginning of May nesting operations usually commence, and the locality usually selected is generally a low bush, furze or bramble, or amongst the tall grass on a bank or hedge, and sometimes tolerably close to a building, in a rose or briar that has been trained or tied to the wall. The nest is built of fine twigs, dried bents of grass or hay, with a little green moss, and frequently lined with small thin fibrous roots; sometimes, however, the inside of the nest is found to be completed with no other material than what is used for the outside.

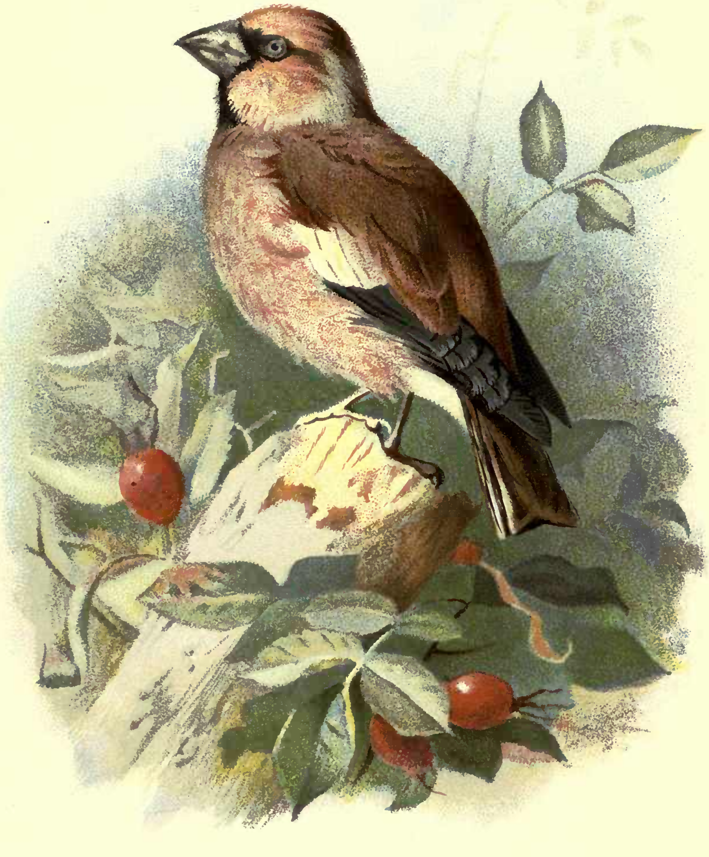
Four or five eggs are laid; they are of a dull bluish-white colour, streaked, blotched, and speckled with dark reddish-brown. The eggs, however, appear to vary very much both as regards the grounding and the marks. The young birds have the breast of a pretty pale yellow, with dusky streaks, the back is a light brown, speckled with black; the olive tint appears after the first moult, and deepens as the bird grows older.

The length of the Cirl Bunting is nearly six inches and a half; bill a pale bluish colour; iris dark brown; above the eye is a streak of bright yellow, which comes round behind, and then across the upper part of the breast, offering a strong contrast to the black throat above. There is a yellow spot on each side of the head, the top of which is dark olive; the back and sides of the neck are yellowish-grey; the throat is black, slightly tinged with green; the breast a dull olive, crossed with a chestnut brown band; the back is a rich chestnut brown, with the edges of the feathers tinged with olive, and in the summer it gets a dusky white colour; the tail is a dusky black, the outer feathers being patched with white on the inside, and the outside edge of the external feather is altogether white; under tail-coverts pale yellow, streaked with dark brown; the wings are yellowish underneath, and on the upper surface the feathers are dusky black in the centre, margined with brown and yellowish edges; the lower part of the breast is dull yellow; legs and toes a pale reddish-brown; claws dusky.

The plumage of the female is not so bright as that of the male; the head is without the black markings and the bright yellow; the chin and throat are yellowish-brown, streaked with a darker shade, and the back is streaked with black; the breast is much speckled.

The Cirl Bunting may be kept in confinement without much difficulty, and in any aviary its handsome plumage is always a source of attraction; it is not quarrelsome, and usually a favourite, and it will thrive on canary and grass seeds.





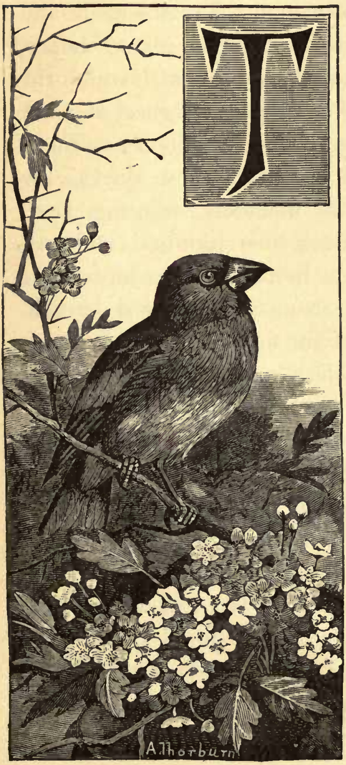
HAWFINCH.

(½ NATURAL SIZE)

THE HAWFINCH.

Coccothraustes vulgaris.

Loxia coccothraustes.



THIS somewhat singular-looking bird is very commonly known as the Grosbeak, French Grosbeak, and Haw Grosbeak. As this last name indicates, the bill is large and powerful, and this circumstance, in conjunction with the fact that its food consists largely of haw-berries, at once explains the name that has been given to it.

The Hawfinch is both a resident in and a visitor to this country—that is to say, it stays in some parts all the year round, whilst other localities it visits only at the beginning of winter, to leave again in the following early spring.

It is, or has been, met with in nearly all the principal counties of England,

and is also said to be seen every year in the hawthorns of the famous Phœnix Park at Dublin. In Scotland also it is occasionally observed. Amongst European countries, it is found in Germany, France, Belgium, Spain, and Italy, and sometimes, though much more rarely, in Sweden, Denmark, and Russia.

The Hawfinch is very shy and cautious in its habits, although, like many other birds, it is considerably more approachable in winter. It feeds upon the fruits, seeds, and berries of such trees as the hawthorn, plum, plane, cherry, laurel, holly, and pine; the strong hard beak with which the bird is provided enabling it to crush the toughest shell or covering with comparative ease. The Hawfinch associates with its fellows in flocks, and in winter these flocks vary considerably in the number of members, ranging from twelve and fifteen up to between one hundred and two hundred. When feeding, one or more of these birds may generally be seen on some open bough or exposed branch, keeping a pretty sharp look-out for unwelcome visitors.

About April the Hawfinch chooses its mate, and nesting operations are commenced without much loss of time. A holly or hawthorn tree is generally selected; but although these have a decided preference, the branches of the oak, apple, or horse-chestnut are not unfrequently made use of. The nest itself is incompact, and is formed to a large extent of lichens, intermixed with twigs of oak, honeysuckle, or similar material; it is lined with vegetable fibres, small flexible roots, and a small quantity of hair or feathers. Four to six eggs are laid, of a pale olive-green, with spots of blackish-brown and streaks of dusky grey; they vary, however, considerably in appearance, some being entirely of a pale green colour.

The young Hawfinches make their appearance about the beginning of May, and when capable of sustaining themselves they congregate in flocks, and are frequent visitors to gardens for peas and various seeds. When interrupted they fly off under the trees unobserved, and the mischief they have done is ascribed to mice or other birds.

The note of this bird is soft, agreeable, and plaintive, and in fine weather is uttered all through the winter. In captivity the Hawfinch is said to imitate the song of other birds, and it also makes a harsh, grinding noise with its beak, something similar to the parrot.

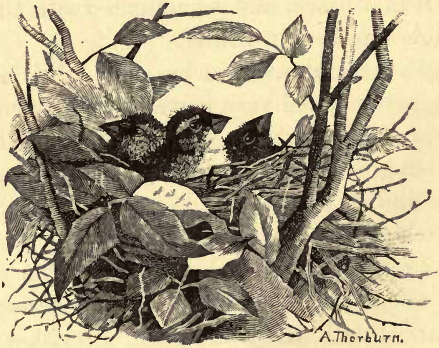
The Hawfinch gets very tame if reared by hand. It always breeds in Sussex, and sometimes visits that county in considerable numbers in winter.

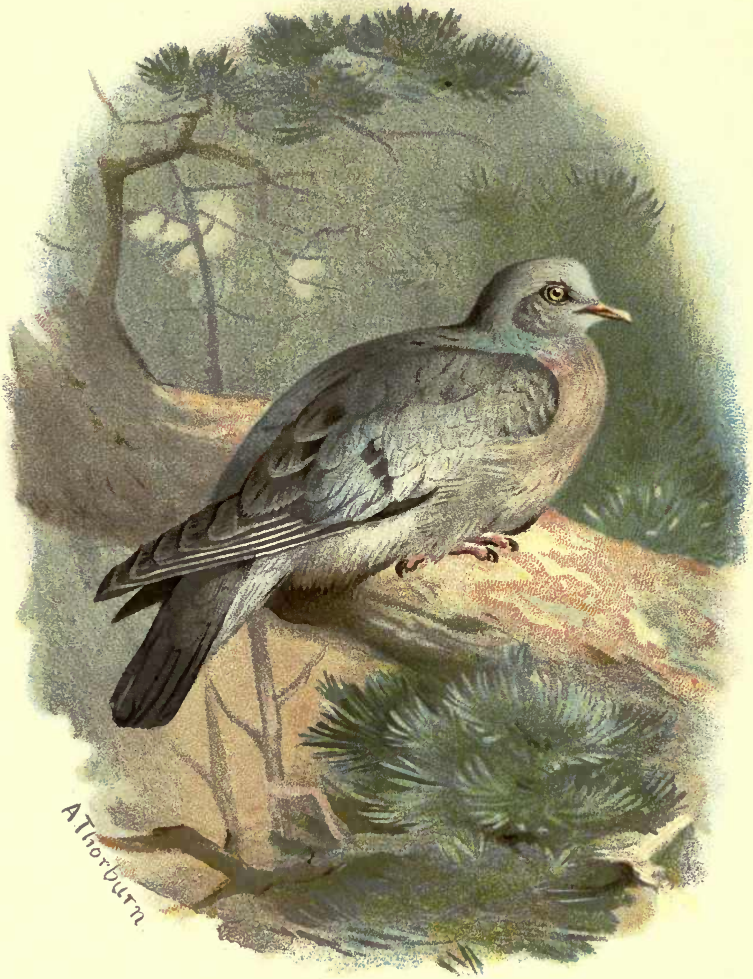
The length is about seven inches; the bill is of a bluish colour, large, pointed, and very powerful; between the beak and the eye is a black mark, meeting the black of the throat in a point; iris greyish-white; head yellowish-brown; neck is crossed behind by a broad band of ash colour; chin and throat velvet black; breast pale brown; back dark brown, changing to brownish-grey, and downwards to a yellowish-brown; the wings are about eleven inches across, and are variously marked with blackish-brown, greyish-white, and yellowish-brown; some of the wing feathers are curiously formed in the shape of a bill-hook or battle-axe, and the quill feathers near the back are square at the ends. The tail is remarkably short and black, with some markings of white, the middle feathers being somewhat shorter than the rest; upper tail-coverts yellowish-brown; under tail-coverts white; legs, toes, and claws are brownish-red.

The female is generally considered to be a trifle smaller than the male; she is like the male in appearance, but not so handsome, and the markings are more blended, and the black markings near the eye and on the head and neck are not so conspicuous. Varieties are occasionally seen partly white.

The young birds somewhat resemble the adult female, but are speckled nearly all over, and the beak is dark.

They are often very mischievous if put into an aviary with other birds.

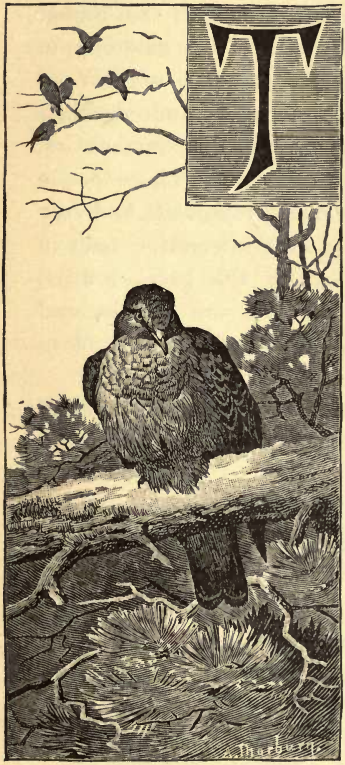




STOCK DOVE.
(1/3 NATURAL SIZE)

THE STOCK DOVE.

Columba œnas.



THIS bird is very similar in appearance and habits to the common Wood Pigeon, with which it not unfrequently associates. It is, however, partly migratory in its habits, leaving certain parts of this country about the end of October.

The Stock Dove is by no means equally distributed in Great Britain, being common in some localities and rarely met with in others. It is also local even in those counties where it is to be seen, and seems to possess strong partialities to certain districts. This is the case in the counties of Norfolk, Hertfordshire, Essex, and other parts of the midlands, where it seems most generally found.

In Europe the bird is said to be met with in Germany, France, Spain, Italy, Norway, and Sweden; also in different parts of Asia and North Africa.

The food of the Stock Dove resembles that of the other wild pigeons, and comprises peas, grain, seeds of various descriptions, beech-mast, berries, and small acorns, particularly the first two items. In their search for food the birds frequent cultivated fields, woods, coppices, plantations, &c., and usually roost amongst the higher branches of the beech or fir. In winter they assemble in flocks, sometimes of large size, and associate with Wood Pigeons on the most amicable terms. Indeed, their amiability seems to be one of their principal characteristics, for although they build in some cases quite close to one another, the greatest harmony invariably prevails, and very seldom is a quarrel detected. Another interesting trait in the character of the Stock Dove is the great mutual affection which exists between the male and female, and this is particularly noticeable in birds that are kept in confinement.

The birds run rather quickly when on the ground, nodding the head with the peculiar action common to all the family; their habits and appearance are very neat, and they are fond of pluming themselves when perched. The flight is strong, sustained, and exceedingly rapid, the rush of the wings being plainly observable when passing within a short distance. When first they take flight a loud clapping noise is made by the violent striking together of the wings, and when a large flock is suddenly put into motion the sound produced is really of an astonishing kind; indeed, without actually experiencing an instance of this kind it would be difficult to form a just opinion of the extent of the disturbance.

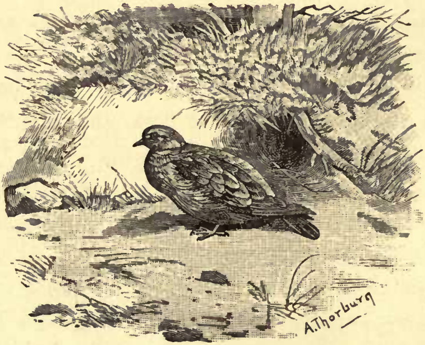
The Stock Dove commences nesting about the beginning of April, sometimes earlier if the spring is forward, but the nest is a very careless construction indeed. In some cases it scarcely deserves the name, being nothing more than a few sticks loosely piled together. Holes in trees, old rabbit warrens, and hollowed places beneath bushes are favourite places, and the same nesting place is often made use of for two or more years in succession, possibly by the same birds. The eggs number two, and are white, smaller than those of the Wood Pigeon, and of an oval shape. During incubation the male bird frequently returns to his mate during the day, and seems to evince the most solicitous interest in the whole proceedings. The female sits very closely, and quits her eggs with great reluctance, in some instances even permitting a person to touch her while in the nest. The brood is hatched in about seventeen or eighteen days, and the young pigeons are generally able to fly in a month.

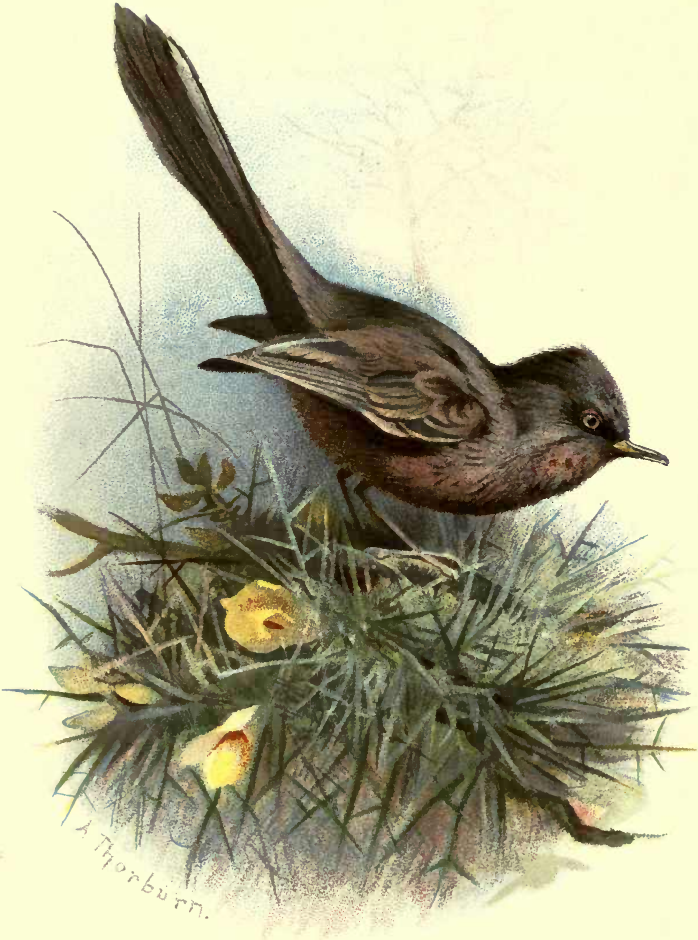
The note is a simple "Coo-oo-oo," the last syllables being more prolonged than the first, and the "cooing" is heard both in the morning and evening.

The length of the Stock Dove is about fourteen inches; the bill pale orange-brown, with greyish edges; the cere red, excepting the hinder portion, which is white; iris reddish; head and crown bluish-grey; sides of the neck glossy, iridescent-green, and purplish-red; back of neck and chin bluish-grey. The plumage of the upper part of the back is a bluish-brown, then bluish-grey, and grey on the lower part. The wings are dark bluish-grey, with markings of black; under wing-coverts grey. The tail is rounded somewhat, and is bluish-grey for two-thirds of its length, then marked with a narrow band of lighter colour, and the end dark leaden-grey; the outer edge of the outside feathers are nearly white. Under tail-coverts grey. The legs are partly feathered, and, with the toes, are of a bright carmine-red; claws light brown.

The female is a trifle smaller than the male, but differs little in general appearance, the markings being, however, not quite so distinct, although it is frequently difficult to distinguish the hen. Slight variations in plumage are occasionally met with in individual specimens.

The Stock Dove may be kept without any difficulty, and becomes tame and even affectionate in captivity, if reared from the nest.

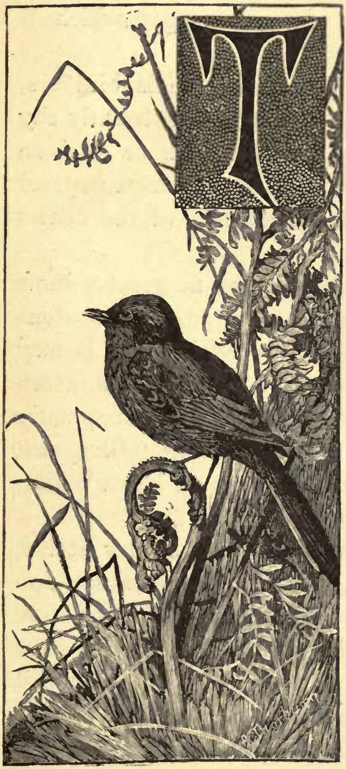




DARTFORD WARBLER.
(3/4 NATURAL SIZE)

THE DARTFORD WARBLER.

Sylvia Dartfordiensis.
Motacilla provincialis.



THIS pretty little warbler is tolerably well distributed throughout the south-eastern counties of England, but is found most abundantly in Kent, Surrey, Sussex, and Middlesex. In some localities it is commonly known as the Furze Wren, a name indicating its partiality for thick growths of furze. It remains with us all the year round, and may be seen actively searching for food amongst its prickly haunts, even when the branches are thickly laden with snow.

The Dartford Warbler is extremely active and nimble in its movements, and its habits are restless and untiring. Its food consists for the most part of insects; flies, spiders, grasshoppers, moths, small beetles, and caterpillars, all being captured and devoured indiscriminately.

In capturing its winged food the movements of the Dartford Warbler are by no means dissimilar to those of the common Whitethroat, this bird also often indulging in short, rapid flights after its prey, and quickly returning to its perch. The flight is jerky and irregular, and seldom indulged in to any great distance; in fact, the bird is rarely seen to quit the clumps of furze amongst which it finds its regular food.

The peculiarities of this interesting little bird are, however, not very easily observed, for it is extremely shy and cautious in character, and if too sudden or close an approach is attempted it instantly leaves the more exposed branches for the security and concealment of the denser parts.

The note is shrill and piping, but of no great volume or variation. Its owner would appear anxious to atone for these deficiencies by continuous repetition, and it may sometimes he heard "in full vocal strain" for from fifteen to twenty minutes without cessation. It also frequently utters a sort of chattering cry, resembling "Cha, cha, cha." They sing while hovering in the air like a Whitethroat, then dart into the furze.

The Dartford Warbler builds its nest of dry stalks, fibrous twigs, bents of grass, and similar materials; frequently there is an interweaving of wool. The structure is apparently somewhat loosely put together, but a close examination generally shows it to be far stronger than it appears. Furze bushes are chosen as the most suitable nesting places, and the nest is generally about a couple of feet from the ground. The eggs number four or five: they are of a greenish-white ground colour, and fully speckled with olive-brown and ash colour; around the thicker end the markings form a pretty distinct belt or zone. There is a general resemblance in these eggs to those of the Whitethroat, the latter, however, being a trifle larger, and of a dirtier colour.

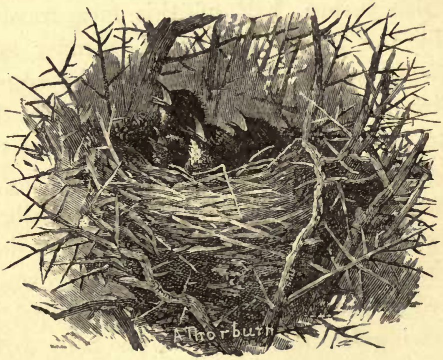
The Dartford Warbler was first recognised as an inhabitant of Great Britain by Dr. Latham, rather more than a century ago; the first specimen was noticed at Dartford, in Kent—hence its name.

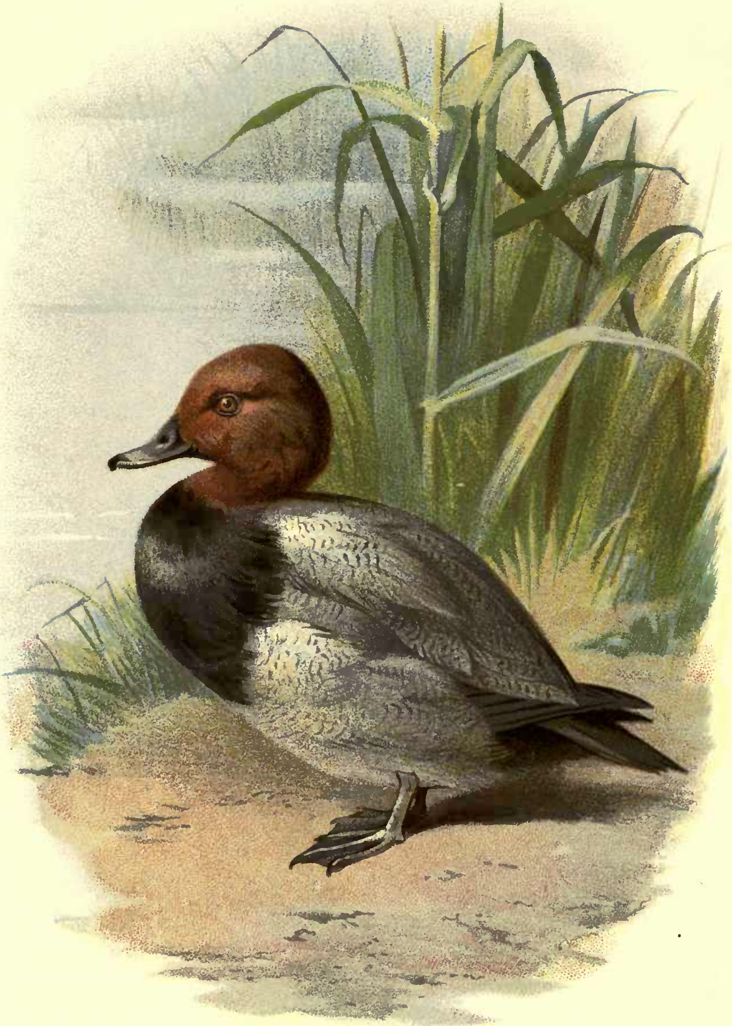
The entire length of the Dartford Warbler is rather more than five inches, half of this measurement being taken up by the tail. The beak is slender, and nearly black, particularly towards the point; the edges of the upper mandible and the base of the lower one reddish-yellow; irides reddish; the head, cheeks, neck, back, and upper tail-coverts are greyish-black; the wing-coverts, wing, and tail-feathers blackish-brown, with edges of a rather lighter colour; the chin chestnut brown, with specks of dull white; the throat, breast, and sides are chestnut brown, without spots; the edge of the wing between the carpal joint and the spurious wing-feathers is white; the belly dirty white; under surface of the wings, under tail-coverts, and under surface of the tail-feathers slate-grey; the tail is somewhat pointed, the feathers on the sides being considerably shorter than the centre ones, and having an edging of light grey. The legs and toes are pale reddish-brown; claws darker brown. The young birds as well as the females are lighter than the males on the under portions of the body, and there is more brown on the upper parts.

In an aviary the bird is active and cheerful, and its graceful sprightly movements cannot fail to attract attention;

but it is rather difficult to keep in health. It should be fed the same as a Nightingale.

Since the winter of 1880 these birds have not been observed in Sussex, owing doubtless to the severe snow-storms which then took place, and it is probable that it will be a long time before they again become plentiful, as they are not very migratory in their habits.



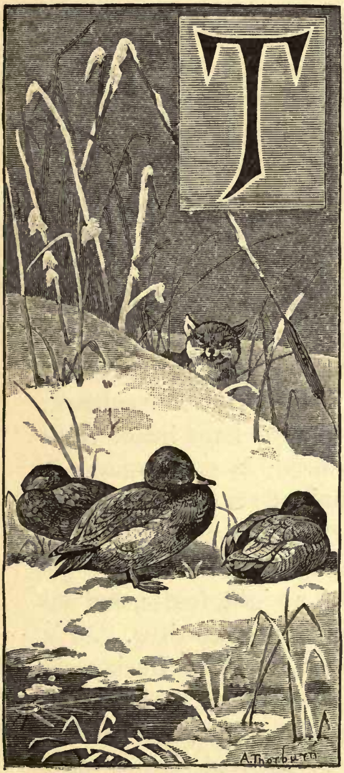


POCHARD.

(¼ NATURAL SIZE)

THE POCHARD.

Anas ferina.
Fuligula ferina.



THIS bird is variously known as the Dun-bird, Red-headed Poker, and Red-eyed Poker. The last title has been bestowed on it from the peculiar colour of the eye, which, as Yarrell observes, is not seen in any other British duck.

It will be seen by the illustration that the Pochard is a handsome and striking-looking bird, the plumage being exceedingly showy, and the markings well contrasted and defined. In the adult male the central portion of the beak is pale blue, whilst the base and point are black; the irides are red; the head and upper part of the neck all round rich chestnut-red; the neck below deep black; the back, scapulars, tertials, and wing-coverts are freckled over with very small grey specks and lines over a ground of white; primaries and secondaries nearly uniform grey, the primaries ending in dark brown; the secondaries tipped narrowly with white; the rump and upper tail-coverts are nearly black; and the tail feathers uniform greyish-brown; the breast, sides, and belly are a greyish-white, produced by small grey markings on a white ground; under tail-coverts black; legs and toes bluish-grey; membranes bluish-black.

In the female the bill is black; the irides reddish-brown; head and all the back of the neck dusky greyish-brown; the back and wings are darker than in the male; the lower parts are a dull greyish-white; and the under tail-coverts dark grey. The young males at first resemble the females, but the back feathers and scapulars are brown with pale edges; the complete adult plumage is assumed slowly.

This variety is not so slender and graceful in appearance as the Wild Duck, the body being more compact and short; it swims low in the water, and from the backward position of the legs walks slowly and with an awkward gait.

The Pochard is found in most of the large inland lakes and rivers, as well as on the sea-shore; in some seasons it is very abundant, and large numbers are exposed in the markets and shops for sale. They are by some considered excellent eating; we do not think much of them.

This bird is for the most part a night feeder, and its general character is shy, suspicious, and cautious. It is not so easily taken in decoy nets as the Wild Duck, as it dives with great ease, and frequently escapes from the pipes by passing out under the water. The usual cry is a low whistle, but when alarmed or annoyed they utter a hoarse kind of croak like kr, kr, kr. The flight is rapid, though its wings are small for its size, and are moved with great rapidity and considerable noise.

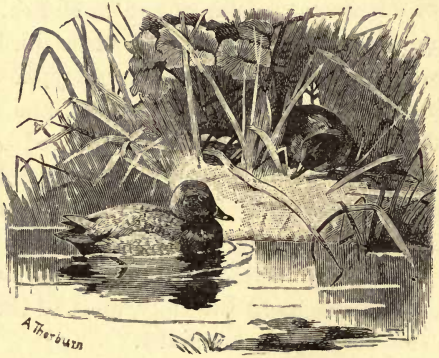
Pochards are good birds to keep in confinement or on ornamental waters, as they get tame and readily pair with other Ducks, especially the Tufted Duck. They feed in company with Wild Ducks and other water-fowl, but separate from any but their own kind if compelled to take flight. Being accomplished divers, they seek their food by tearing up branches of weeds from the bottom of the lakes which they frequent. The food consists principally of aquatic vegetable matter, and when on the sea-coast, of crustacea, mollusca, and small fish.

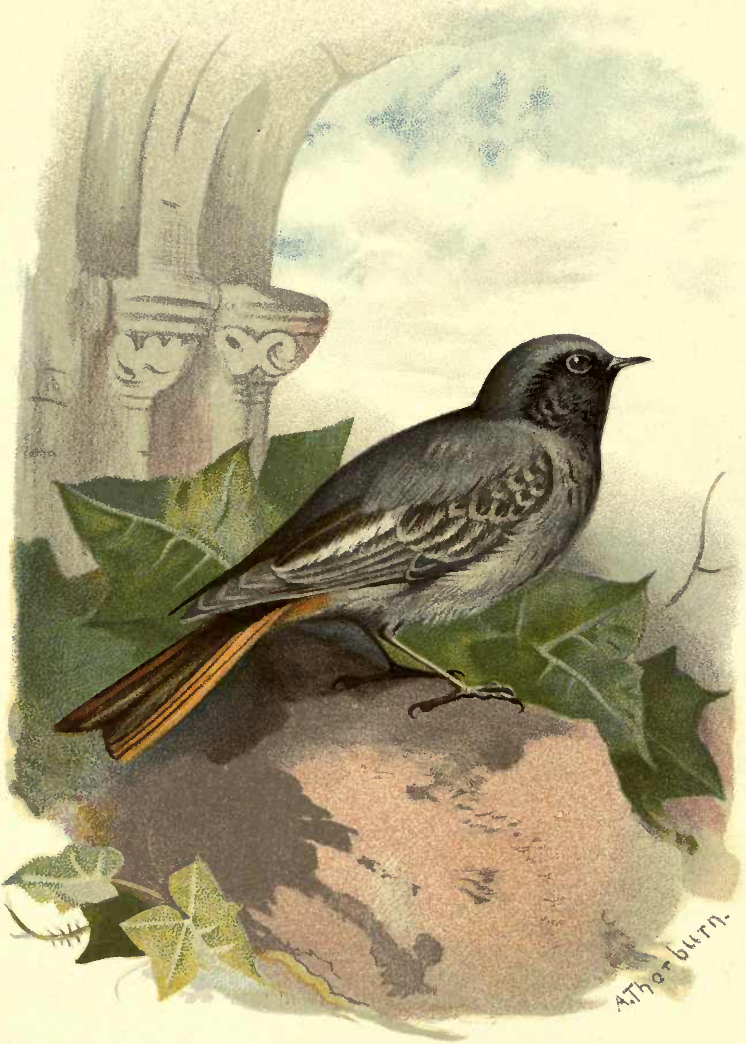
Although the great majority of these birds breed in much higher latitudes than our own country, no doubt some few remain with us throughout the year, and are said to breed regularly in Yorkshire, Dorsetshire, and some of the midland counties; they have also been known to breed in Ireland, and Mr. Hewitson says that a small number remain through the summer in Holland, and rear their broods on the borders of the inland meres so numerous in that country, whence, most probably, most of those exposed for sale in this country are obtained.

Great numbers of Pochards are winter visitors only, making their appearance about the first week in October, and leaving again in the spring for their breeding stations in the higher regions of the north.

The nest, which is usually almost entirely concealed by flags or coarse grass, is built of old dry flags and reeds, and the eggs are covered with down from the parent bird's breast. It is placed amongst high grass, rushes, or similar coarse herbage, and the eggs vary in number from ten to twelve. The colour of the eggs is a buffy white, the length about two inches, and the breadth one and a half. The young when first hatched are covered with dark brown down.

The Pochard is well known in America, Denmark, Sweden, Holland, Russia, North Germany, and some other countries of Europe. It is also found in the Islands of Orkney and Shetland.

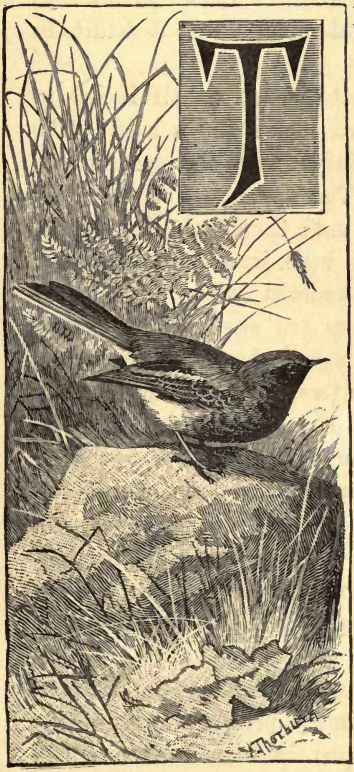




BLACK REDSTART
(⅔ NATURAL SIZE)

THE BLACK REDSTART.

Sylvia tithys.
Phœnicura tithys.



THIS elegant little bird, sometimes known as the Blackstart and Black Red-tail, is of migratory habits, arriving in this country as a rule about October, and staying with us until late in the ensuing spring. It has hitherto been considered a decidedly rare bird; but, although it certainly cannot be regarded anywhere as common, there can be no doubt that it is far more plentifully distributed than is usually supposed. The writer has within the past few years met with several in the vicinity of Brighton, and it is therefore fair to suppose that the statements concerning its extreme rarity arise more from insufficient observation than actual fact.

Another well-received and commonly-accepted theory about the Black Redstart is, that the male bird does not assume its complete plumage until the spring after hatching. Attentive study and careful investigation have, however, clearly shown that this idea is not based upon fact. Until recently, the Grey Redstart, which is also a winter visitor, was not believed to be one of our regular visitors; and there can be no doubt that the males of these last-mentioned birds have been constantly mistaken for Black Redstarts in immature plumage.

The Black Redstart is about five and a half inches in length, the tail measuring two inches and a half. The beak is black and sharply-pointed, with the corners and inside of a yellowish colour. The upper part of the body is a deep bluish-grey; rump red; throat, cheeks, breast, and belly a sooty black; the vent is a reddish-yellow; wing-coverts are blackish, bordered with white; the hindermost of the quill feathers are dark brown with a broad white edge, forming a long marking on the wing; the tail is a yellowish-red, with two feathers of dark brown in the centre. The female is of a mixed ashen grey on the upper parts of the body, and underneath ashen grey tinged with red; the chin is whitish, and the borders of the wing feathers are not so strongly defined as in the male, and of a reddish-white. The young birds in their first plumage have most of the feathers of the upper and under parts barred and tipped with black, giving a speckled appearance.

The Black Redstart in its habits resembles the common Redstart, although more shy, and it prefers localities of a more stony character; it is frequently found near the coast, on the tops of chalky cliffs, farmyards, and open lands;

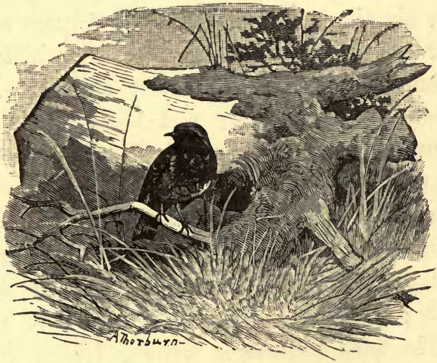
where manure heaps are to be met with, it gets on old posts and rails. It is remarkably nimble and easy in all its movements, being almost continually in action; it stands very erect, and has a peculiar jerky movement of the tail, which is most noticeable immediately it alights. The song, which is not particularly varied, according to Bechstein, "consists of three parts: the middle is little better than a croak, though the upper and lower possess some high, clear notes;" the song, such as it is, is continued the whole day through. The notes uttered resemble the syllables "fid, fid, tack, tack." The Black Redstart is called in some places the "Wall Nightingale," but as regards vocal ability there is between the two birds little or no comparison. It feeds principally on caterpillars, worms, flies, and other insects. It frequently catches its food in the air like a Fly-catcher, and returns to its post again after the manner of that bird, at which time the jerky motion of its tail is particularly noticeable.

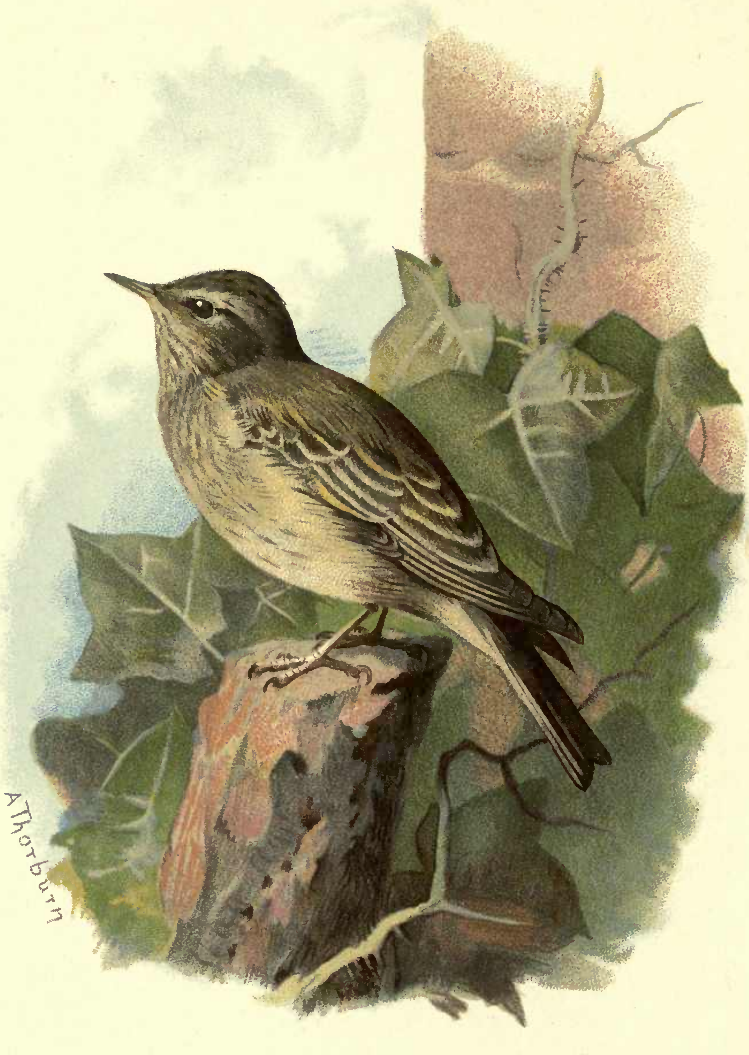
The nest, which is large and loose outside, but extremely round and neat inside, is built of hay, dried grass, or moss, with a mixture of hair, wool, and usually a few feathers for a lining, and is usually placed in holes in walls, ruins, lofty old buildings, and sometimes in the face of chalky banks or cliffs. About six eggs are laid, of a pure white; the shell is unusually clear, and very easily broken. The bird evinces a strong liking for certain localities, and will return year after year to the same place. The flight is easy and graceful, varied by constant undulations.

The Black Redstart is common in Germany, France, Greece, Spain, Italy, and, indeed, all the southern parts of Europe, and proportionately rare in the higher latitudes.

It has been met with at various times in the majority of our English counties, but it is worthy of notice that Sussex and Devonshire have furnished more specimens than perhaps all the other localities together. Its habits in North Germany appear somewhat different from what they are in this country, as there they are said to be very familiar—in fact, more like our Robin—in their habits and manner of life, coming into gardens, farmyards, and orchards, and even perching on the eaves of the house.

The Black Redstart is an attractive bird in a cage or aviary, and soon becomes tame. It should be fed and treated as a Nightingale.



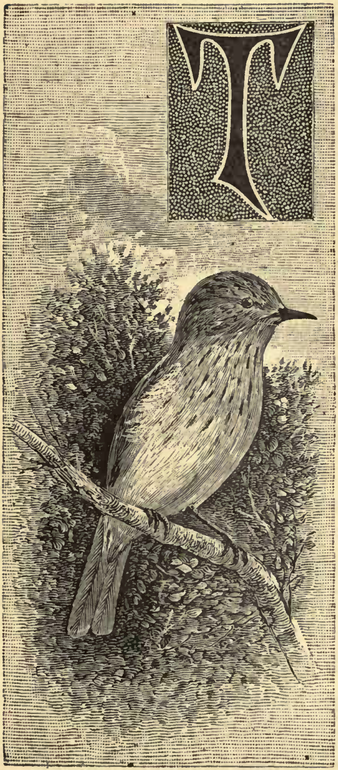


SPOTTED FLYCATCHER
(3/4 NATURAL SIZE)

THE SPOTTED FLY-CATCHER.

Southwold

Muscicapa grisola.



THE Spotted Fly-catcher is a thoroughly familiar visitor to this country. Its arrival usually takes place early in May, but the dates of its appearance in different localities are subject to considerable variation. As a rule, it does not make its appearance until the oak trees show their leaves. It rarely prolongs its visit to our shores beyond September or the early part of October.

Like most of our well-known birds, the Spotted Fly-catcher rejoices in somewhat of a long list of titles, more or less applicable to its character and habits. It is known in different localities under the names of "Beam-bird," "Rafter," "Cobweb-bird," "Bee-catcher," "Post-bird," "Cherry-chopper," and "Cherry-sucker," names all showing considerable powers of observation.

This little bird, although of apparently solitary tastes, is by no means of a shy or retiring disposition, and is most commonly met with in gardens, orchards, shrubberies, and well cultivated districts. It delights to haunt the borders of woods, parks, and pleasure-grounds, and similar places not far removed from the habitation of man. It certainly gives the casual observer the impression of being dull and mopish, as its attitude when perched on the top of some fence or the extremity of a branch is listless and seemingly meditative; but a very short observation will suffice to dispel this idea, for let some wandering fly or other winged insect venture within a reasonable distance and the Fly-catcher is after it like a flash. As a rule it captures its food rapidly and neatly, a distinct snapping of the beak plainly indicating the success of its short journey. After securing a morsel in this way the bird either returns to the post it had occupied or alights on a similar point of vantage close at hand. The names Cherry-sucker and Cherry-chopper have undoubtedly been suggested by the bird's great partiality for the vicinity of fruit trees, which naturally afford a good supply of the insects and moths upon which it almost exclusively feeds. According to some authorities it also feeds on berries in the autumn, but we have never noticed it eating fruit of any kind, and think it very improbable.

The song of the Fly-catcher is not very melodious or long sustained, and has been not inaptly described as "a weak chirp, having something in it which attracts attention."

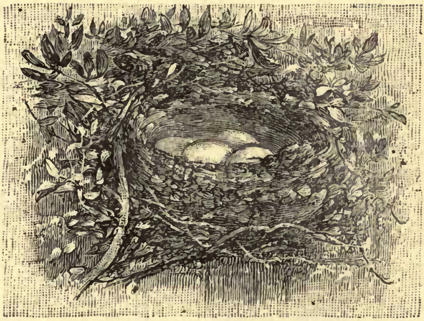
The nest varies considerably in construction, and is built of twigs, moss, fibrous roots, or any similar material, and is lined with down, horsehair, feathers, or cobwebs. The birds make little or no attempt to conceal their habitation, and exhibit great partiality to the same situation, using some favourite spot many seasons in succession. The Fly-catcher builds in a variety of places, amongst the creeping shrubs that adorn the trellis-work of verandahs, on the beam of some garden tool-house or shed, in the sides of faggot stacks, and frequently between a wall and a tree trained against it. The parent birds take but little notice of the presence of passers-by, or persons who may be engaged in work in their immediate neighbourhood. The eggs number four or five, they are of a greenish or greyish white, spotted, blotched, and clouded with various shades of yellowish-brown or greyish-red. Some eggs are so richly covered with spots as to almost hide the ground colour; others have the markings confined to a zone round the large end; others are more evenly marked, and clouded with a faint roseate tinge. The young birds receive the most assiduous attention from their parents until they are quite capable of providing for themselves.

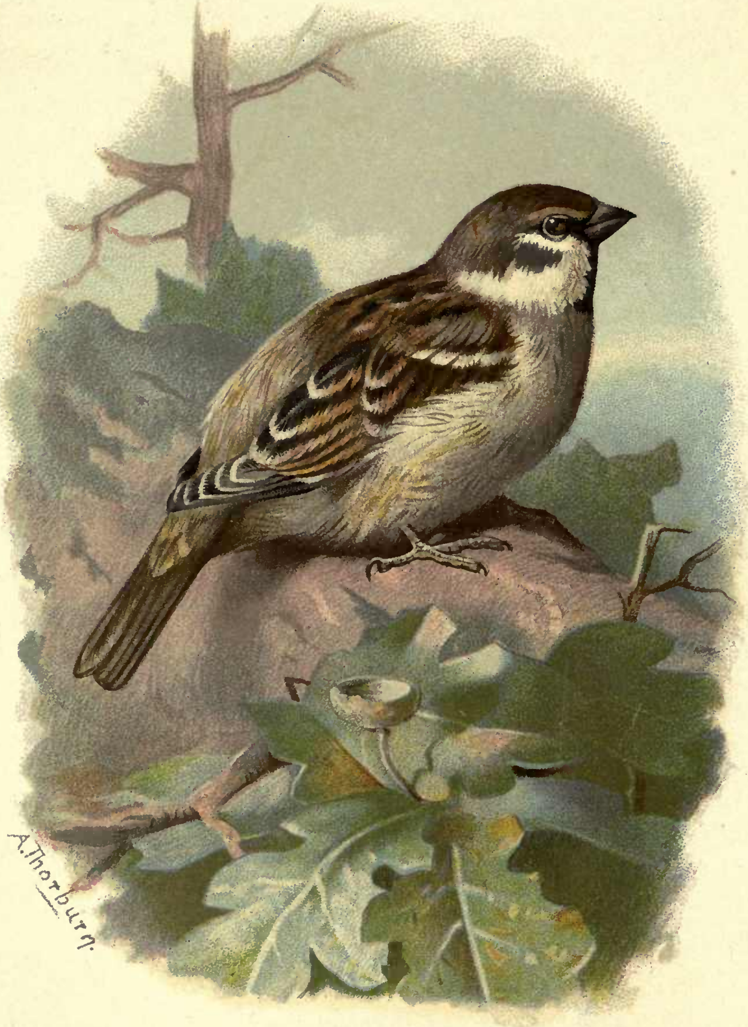
In plumage the Spotted Fly-catcher is very plain and unobtrusive. The beak is flatted, and rather broad at the base, which is surrounded by a few bristles. Iris is dark brown; head brown; crown spotted with a darker colour; sides of the neck streaked with brown; chin and throat a dull white, the latter being streaked with brown; breast a dull white, tinged at sides with yellowish-brown; back a light brown; tail slightly forked, of a brown colour, somewhat lighter at the tip; legs, toes, and claws dusky black.

There is very little difference in the appearance of the sexes, but the young birds present a somewhat speckled appearance, owing to the feathers being at first marked with a pale yellowish-white spot at the end.

The Spotted Fly-catcher is said to be tolerably well distributed throughout all southern and central Europe, and along the western coast of Africa. In Great Britain it is much less common in the extreme north than in the other portions of the kingdom, and in the islands of Orkney and Shetland it is very rarely seen; it is a regular visitor to some parts of Ireland, but very locally distributed even in those counties in which it is found.

The Spotted Fly-catcher can with difficulty be kept in confinement, but when so kept it becomes very tame.

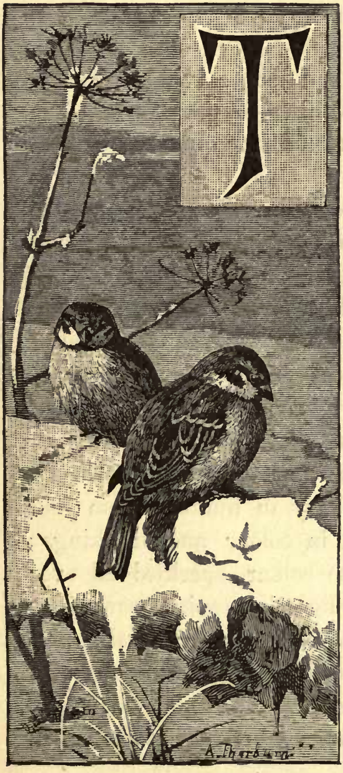




TREE SPARROW
(3/4 NATURAL SIZE)

THE TREE SPARROW.

Passer montanus.



THE poet has told us that there are people in the world to whom "a primrose on a river's brim" is a primrose, and "nothing more," and it is equally certain that there are numbers of unobservant mortals to whom a "sparrow" is a "sparrow," and nothing more, and who are really not aware of the differences of plumage, character, habits, and ways that distinguish the "Tree Sparrow" from his more obtrusive and impertinent kinsman, the "House Sparrow." Unlike the Common Sparrow, this bird is extremely timid and wary, making its home and seeking the means for its subsistence often far from human dwellings and villages, and building its nest in the holes of trees.

When severe weather prevails for any length of time it becomes bolder, and may then be seen approaching close to inhabited places in search of food; but as soon as the frost and snow is gone it leaves for the open country again.

The food of the Tree Sparrow principally consists of any kind of seeds or grain, also insects, and the tender parts of vegetables. Its movements when on the ground resemble those of the Common Sparrow, being quick, active, and lively, and when it settles it has a very noticeable habit of moving the tail similar to the Wagtail; the flight is laboured, heavy, and rather rapid. In the colder portions of the year these birds congregate in flocks, and usually keep close together, and hop quickly about on the ground in search of food.

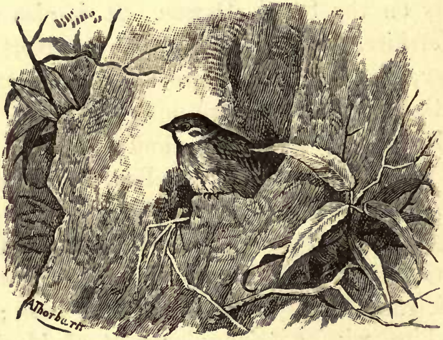
The Tree Sparrow builds early in the year, and commonly selects for the purpose a hole in a tree; but sometimes, it is said, nests in the thatch of a barn or isolated outhouse, in wood faggots, old walls, and even the old nests of magpies and crows. The nest is composed of hay and twigs, lined with wool, down, and feathers: it is loosely and untidily put together, and is often used by the same birds for several seasons in succession. Sometimes the nest is domed over, but in the majority of cases the nest is cup-shaped. The eggs vary in number from four to six, and differ very much in colour and markings; usually they are of a dull white colour, speckled all over with different shades of light greyish-brown, or brownish-grey. Two or three broods are generally produced in the year. The old birds are very anxious over their offspring, and if their nest is approached will hop restlessly from branch to branch, uttering their shrill chirping alarm-note.

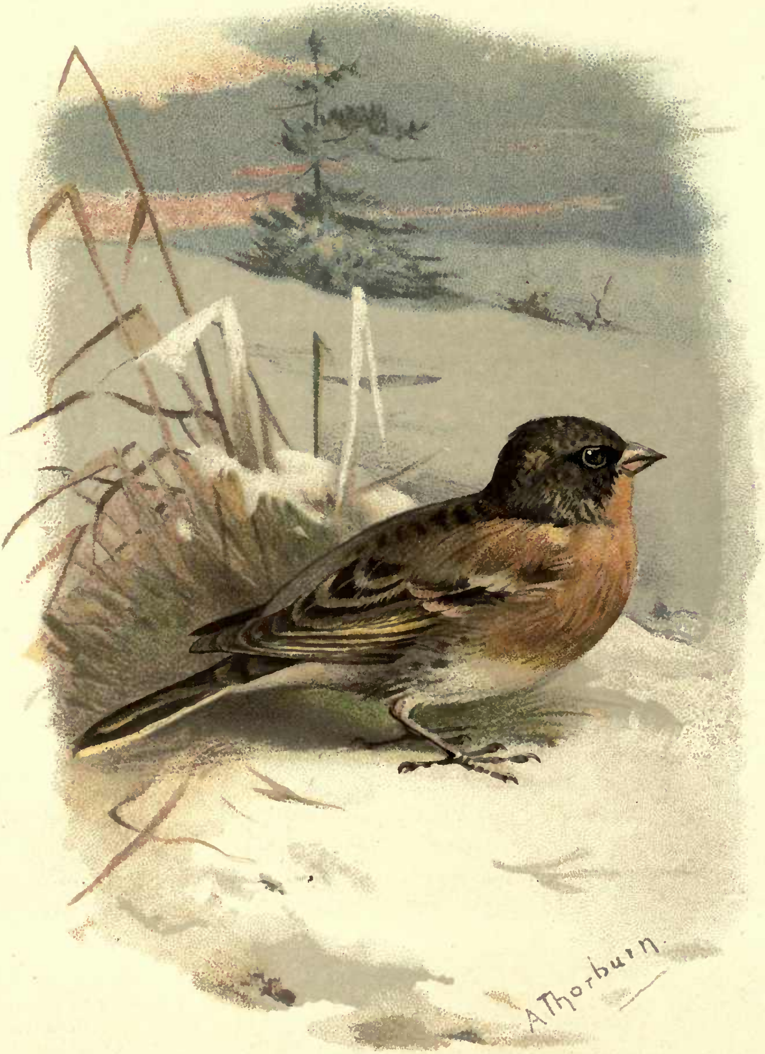
The song of the Tree Sparrow is somewhat similar to that of the Common Sparrow, but is higher, consisting of numerous chirps, varied by some agreeable notes, which are continued for some minutes in a loud key; but the entire performance is unmistakably sparrow-like.

This bird is said to be indigenous in most European countries, and is also to be found in many parts of Asia. As regards our own country, it is locally migratory, arriving in Sussex about October in considerable numbers, and departing in April, or earlier. It has been, and still is, frequently caught in company with other birds by the bird-catchers on the South Downs. It is also met with in Worcestershire, Lancashire, Shropshire, Northamptonshire, Surrey, Essex, Lincolnshire, Yorkshire, and a few other counties. In Devonshire and Cornwall it would appear to be almost unknown; and the same remark, according to other writers, applies to Ireland and Scotland.

The length of the Tree Sparrow is about five and a half inches. The iris is dark brown; head chocolate, and a black streak runs through the eye to the beak; sides of the neck white, with a triangular spot of black on the cheek; throat black; back of the neck chestnut, streaked with black; breast greyish-white, tinged with brown on the sides; back chestnut, with black streaks or spots. The wings have two distinct bands of white across them, and are of a blackish-brown colour; the under wing-coverts are pale fawn colour; the tail feathers are nearly all of equal length: they are of a greyish-brown, edged with yellowish-grey. The legs are a pale yellowish-brown, as are also the toes and claws.

The female, unlike the House Sparrow, resembles its mate in plumage and general appearance, but is not quite so large; hence the sexes are very difficult to distinguish. With the exception of a little extra brightness in the spring, the plumage of the Tree Sparrow remains unaltered all the year round.

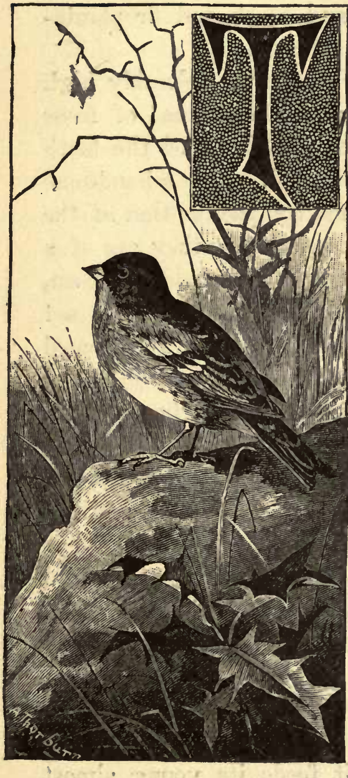




BRAMBLING
(3/5 NATURAL SIZE)

THE BRAMBLING.

Fringilla montifringilla.



THE Brambling, Mountain Finch, or Bramble Finch, is a handsome bird, visiting this country in winter only, the number of visitors being apparently dependent upon the length and severity of the cold weather. Its native home is Norway, Sweden, Lapland, and Denmark, though it is met with in some of the southern countries of Europe, and is said to be found in large flocks in the beech forests of Thuringia. In Great Britain it visits most of the counties, but is more generally seen in Dorsetshire, Devonshire, Cornwall, Herefordshire, Surrey, Sussex, Gloucestershire, and the northern counties. It is also to be met with in many parts of Scotland and Ireland.

The bird is very commonly taken in the winter by bird-catchers.

The Brambling usually arrives in Great Britain during the month of October or November, and leaves us again in the following March. It is to a certain extent a sociable bird in its habits, being generally seen in flocks, and very frequently in the company of other small birds (especially Chaffinches) with similar tastes and diet. Uncultivated and waste places and beech and fir plantations are the favourite resorts of this bird.

The nest is built in the fork of some tolerably high tree, frequently a fir or birch, and is composed of moss and lichen, interwoven with pieces of bark of the birch tree, with a lining of feathers and wool. It is a handsome structure, but not quite so neat and compact as that of the Chaffinch. The eggs number five or six: they are of a greenish colour, spotted and streaked with reddish-brown, but they differ in size and markings. The bird does not readily become tame in confinement, nor easily accustomed to its surroundings, although many instances are on record of its breeding during captivity; it has also been known to cross with a Chaffinch.

As an article of food some persons profess to admire the flesh of the Brambling, but the taste is bitter, and not likely to be generally acceptable.

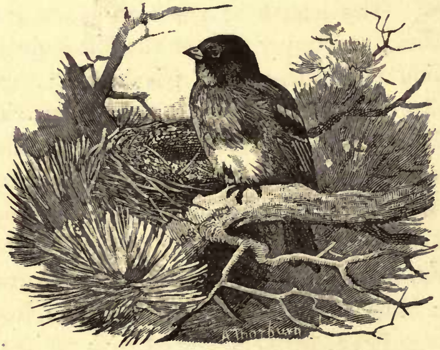
The flight is quick and undulatory, and when the bird is disturbed it seeks refuge in some neighbouring tree. At night, plantations of larch, fir, or laurels are usually sought for roosting places.

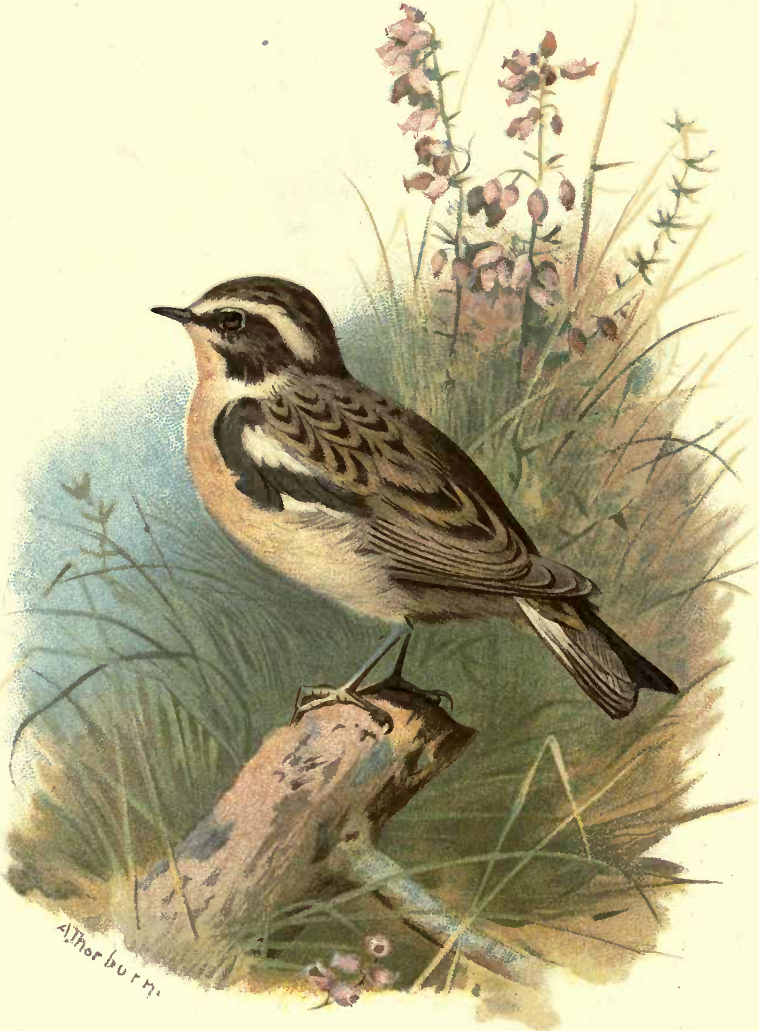
The Brambling feeds on grain, beech-mast, and the seeds of grasses and other plants. Like the Chaffinch, it also eats insects, upon which it feeds its young almost entirely. It seeks its food in wild mountainous places, and does not approach inhabited localities unless driven near them by stress of weather. The note of the bird is a continuous "chuck, chuck," "fayh, fayh," which in confinement is often uttered during night-time; but in the spring time this is changed to a far more pleasing warble, several low notes being uttered in succession, followed by a hoarser note, which is somewhat prolonged; this portion of its song has been compared to the words "Chip-u-wa-a-ay."

As already intimated, the Brambling is a handsome little fellow. The length of the bird is about six and a quarter inches; the upper part of the bill is dusky, and the lower portion yellowish-white; iris brown; top and sides of the head and back of neck, in the winter, rich mottled grey and black, the feathers being black at the base and grey at the tip; in the spring these brown tips disappear, leaving a beautiful velvety black, which remains until the following autumn; chin, throat, and upper part of breast rich orange fawn, lower part a yellowish-white; the greater wing-coverts are black, tipped with orange fawn; lesser coverts a rich orange fawn, feathers tipped with white; when the wing is closed there is an oblique bar across it; the larger under wing-coverts have a small tuft of elongated feathers, and the lesser coverts are bright yellow; the feathers on the rump are white, which is very conspicuous in flight; tail is black, the feathers edged with buffy white, the outer feathers having a patch of white; the tail is forked, upper coverts are black, lower ones white or yellowish-white; legs, toes, and claws a lightish brown.

The female is smaller than the male; her plumage is less pure in colour, and the markings are more mottled in their appearance, and she lacks the black head. The young resemble the females in plumage.

Bramblings have been occasionally met with of a pure white colour, and others with large patches of white about them; some specimens have the chin and throat black.

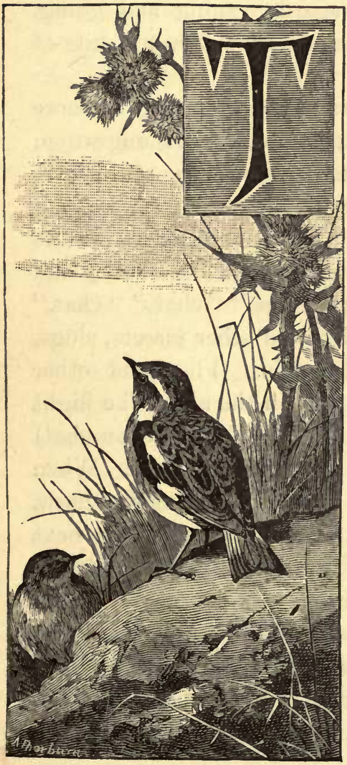




WHINCHAT
($3/4$ NATURAL SIZE)

THE WHINCHAT.

Motacilla rubetra.
Saxicola rubetra.



THIS pretty and active little bird is one of our best-known summer visitors. It is comparatively common in Yorkshire, Norfolk, Suffolk, Northumberland, Dorset, Devon, Wiltshire, Hampshire, Middlesex, Surrey, Sussex, Kent, and Gloucestershire. It is found in Cornwall, but the bird does not seem so partial to the extreme west as to some of the other counties above mentioned. In Scotland it is found in several districts, and is well distributed throughout Ireland.

As is indicated by its name, the Whinchat is most frequently to be seen in localities which abound in furzes, or, as the Scotch call them, whins; but it by no means confines its presence to these spots. Any open, bare, or stony common, with a bush here and there, and even the hedges of meadows or arable lands, are visited with more or less frequency.

The Whinchat is first seen in the eastern and southern parts of this country about the middle of April, and is said to arrive in the more northerly districts some week or fortnight later. It takes its departure either during the end of September or the commencement of the following month, but its movements, both as regards coming and going, depend very much upon the backward or forward state of the season.

The habits of the Whinchat are very similar to those of the Stonechat, excepting in the matter of migration, the latter in very many instances spending the winter with us, while the former never does.

The Whinchat is very sprightly and active in its movements, darting rapidly from bush to bush, and continually uttering its familiar "chat," "chat," "chat." The food consists of flies, beetles, and other insects, slugs, worms, caterpillars, and small snails. Flies and other winged food are captured frequently in the air. The flight is tolerably rapid and easy, and the bird (like the Stonechat) has a peculiar habit of shuffling the wings and tail. When disturbed it usually flies to some neighbouring bush, keeping close along the ground until it reaches its next resting place, and then perching itself on the topmost branch. In addition to the note already spoken of the Whinchat has a pleasing song, melodious, though somewhat uncertain; the song is sometimes uttered when the bird is perched on the highest spray of a bush, and sometimes whilst hovering in the air, and often when sitting on telegraph wires.

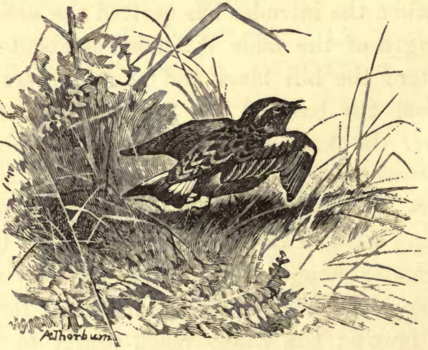
The nest, which is by no means easy to discover, is placed either on the ground, or very close to it, under tufts of grass or sides of railway cuttings; the lower portion of a small furze bush is a very favourite place. It is built of dried grass stalks and moss, and lined with finer pieces of the same material, with occasional additions of wool or hair. Five or six eggs are laid, of a glossy bluish-green colour, with very small specks of dull reddish-brown; the eggs, however, are subject to some little variation. The young Whinchats make their appearance generally during the latter part of May or the early part of June. The parents exhibit considerable anxiety concerning their offspring, and when the nest is too closely approached both of them usually fly round only at a short distance, settling on any stem of herbage, stone, or tuft of grass, and all the time uttering their peculiar cry or call-note, immediately returning when the intruder has quitted the vicinity.

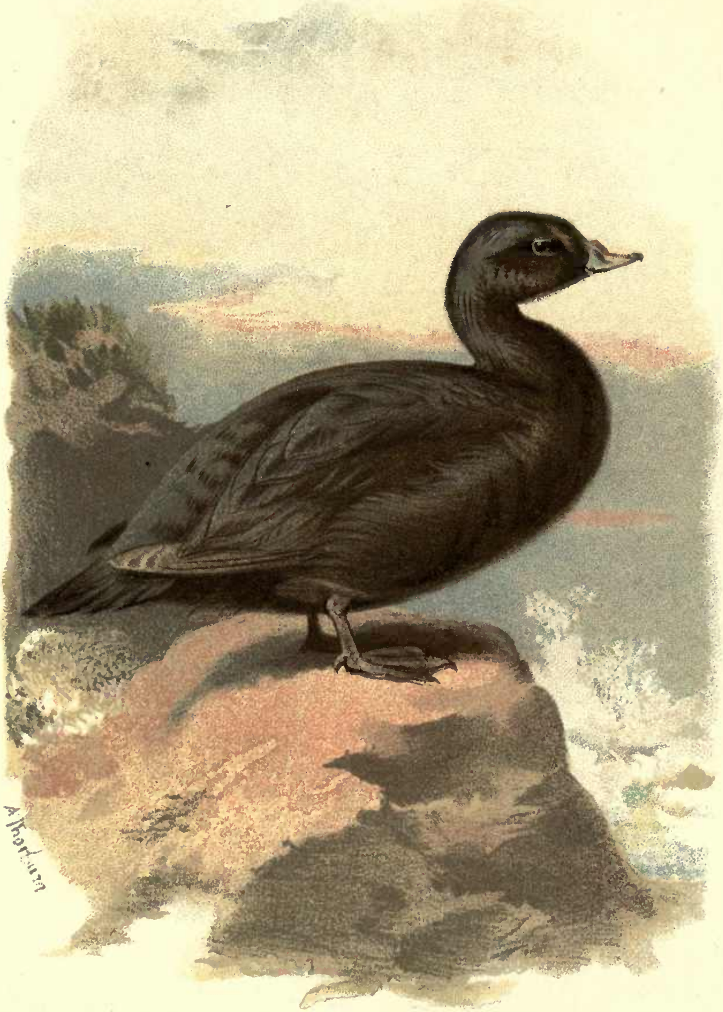
The length of the male Whinchat is about five inches and a quarter; the bill black and shiny; there is a streak of buff from the base of the beak to the eye; irides brown; over the lore, eye, and ear-coverts an elongated streak of white; top of the head, neck, back, and smaller wing-coverts a mixture of pale and dark brown, the feathers being dark in the centre and light at the circumference; greater wing-coverts black; the spurious wing white; wings dark brown; secondaries and tertials edged with light brown; the wings reach nearly to the end of the tail; the tail is white at the base, the end half being dark brown, edged with pale brown; the chin and a line from thence reaching beyond the lower edge of the ear-coverts white; throat and breast delicate fawn colour, passing into pale buff on the belly and under tail-coverts;

the under surface of the end of the tail is greyish-black; legs, toes, and claws black. In the female the white on the wing and over the eye is less conspicuous, and on the under parts the markings are not so distinct as in the male.

The young birds, until after the first moult, have the head, breast, and all the upper part speckled, and after the autumn moult the males and young birds resemble the females, but the sex can be distinguished by the bars on the wings being larger in the males.

The Whinchat is known in Sussex by the name of Barley-ear and Barley-bird, no doubt on account of its habit of getting on the sheaves of corn when they are stacked up.

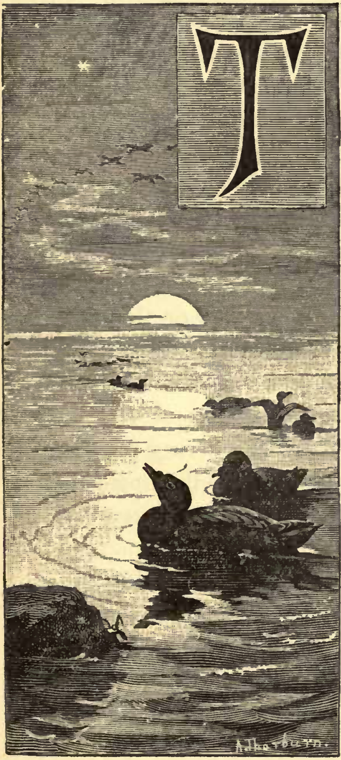




SCOTER
(1/4 NATURAL SIZE)

THE COMMON SCOTER.

Oidemia nigra.
Ana snigra.



THE Common Scoter, which is also known as the Black Duck and Black Scoter, is a well-known bird, especially during the winter months, on many portions of the coasts of Great Britain. It was at one time considered a winter visitor only, but nearly every summer they are to be seen on the sea, off the shores of most of our southern counties.

The Common Scoter is of very sombre, unpretending appearance, and its plumage possesses none of the varied and striking colours so noticeable in most of the Duck family. The adult male is about the size of a Wild Duck, but is very different in regard to beauty of plumage. It has the beak black, except the central ridge of the upper mandible, which is orange; the irides brown; all the plumage deep black; legs and toes dusky black, the webs darker, or quite black.

The bill of the Scoter is rather peculiar in shape, the base being much swollen, and the tip flattened, and terminated by a large flat nail; the nostrils are placed nearly in the middle; they are oval in shape and somewhat elevated.

The tail is short and sharply pointed, and the legs are situated considerably behind the centre of gravity. This last arrangement is the cause of a very awkward gait when the bird walks or tries to run, but is very common amongst those members of the Duck family which pass little of their time on shore.

The food of the Scoter is said to consist almost entirely of the soft bodies of mussels and similar bivalves; these the birds obtain by diving, and for this purpose they approach the shores at each flood-tide. Yarrell states that in consequence of this habit, "the fishermen on the coast, at the ebb-tide, spread their nets horizontally about two or three feet above the beds of shell-fish which are most frequented by these birds. Upon the return of the tide the Scoters approach in great numbers, and diving for their food, become entangled in the meshes of the floating nets; and in this way it is said that twenty or thirty dozen have been taken in a single tide."

The Scoter, however, is not very good eating, the flesh being coarse and oily, and the flavour fishy in the extreme, as usual amongst sea varieties. The Romish Church, however (on this very account, probably), permits the eating of this bird in Lent, and consequently it is in considerable demand in Roman Catholic countries.

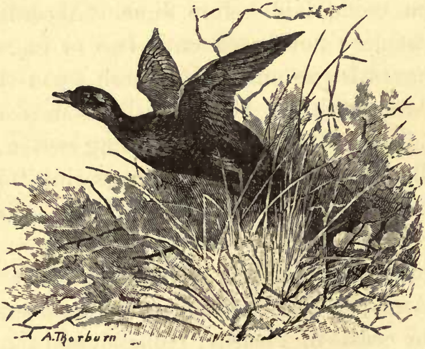
It very seldom breeds in Great Britain, according to earlier writers, but is now known to nest in some parts of Scotland, and in Scandinavia and Iceland it does so regularly. The nest, which is a mere hollow scraped in the ground, is composed of a little dried grass, a few sticks or leaves, and other vegetable material, and lined with a quantity of the bird's own down. The usual number of eggs is six: they are of a pale buff colour, tinged with green; the length is about two inches and a half, and the breadth one inch and three-quarters. The young when first hatched are covered with a dark-brown down above and greyer underneath. It is said that after the females have laid their eggs the males associate in large flocks, and slowly draw towards the coast.

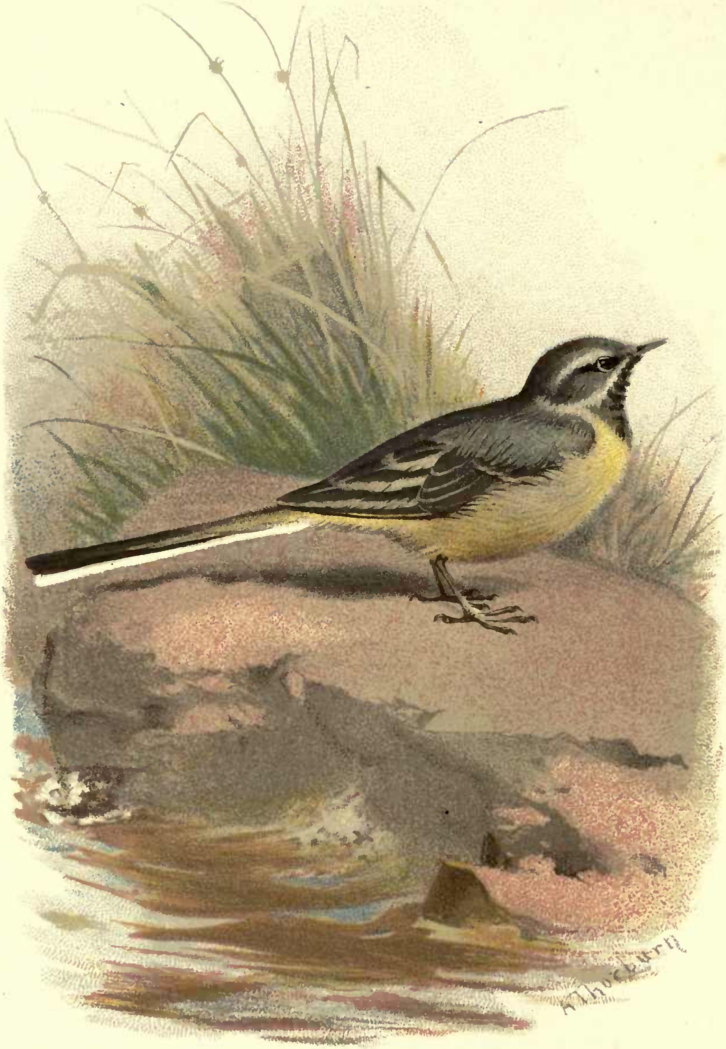
The Common Scoter is said to be a late breeder, the eggs seldom being laid before June. According to some authorities it does not breed until two or more years old, which accounts for so many being seen upon the open sea far from land both off the British Islands and in the North Sea, during the ordinary breeding season.

The call-note is something like a grating "kr, kr, kr," but the drakes have a double call-note which is not unmusical.

The Scoter is found in the northern parts of Europe, Asia, and America, and in winter vast numbers are to be found on the coasts of Picardy, Holland, and many portions of the Mediterranean sea-board. It is by far the commonest Duck that visits the Sussex coast in winter, and sometimes hundreds can be seen together; but they are always very shy, and it is seldom a shot can be got at them.

They always live on the open sea in winter, and do not come on land to feed, like some Ducks. Mr. Seebohm, in his book of "British Birds," mentions that there are few ducks more exclusively marine in their habits or more uniformly gregarious than the Common Scoter. At their breeding grounds in the Arctic regions they seldom ascend the rivers far from the ocean, or associate with other ducks, except of their own class. Thus by their habits as much as by their distinctive colour and appearance, they comprise one of the most sharply-marked varieties of the large Duck family.



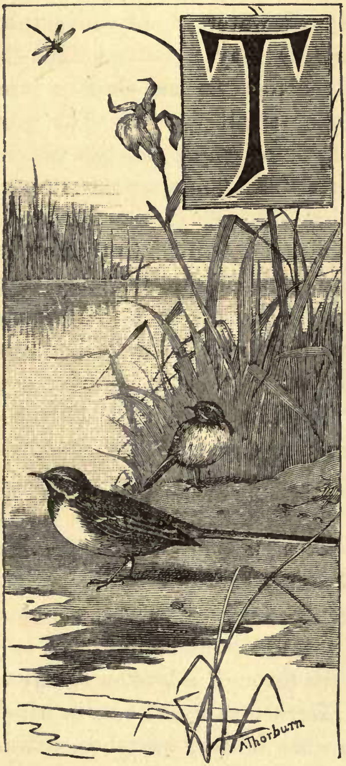


GREY WAGTAIL
(4/7 NATURAL SIZE)

THE GREY WAGTAIL.

Sore Chewold

Motacilla sulphurea.
Motacilla boarula.



THERE is perhaps no member of the feathered tribes found in the British Isles more elegant in shape, more nimble and dexterous in movement, or handsomer in plumage, than the Grey Wagtail. The most indifferent observer, who may chance to watch a pair of these pretty little creatures by the side of some sparkling stream, now running rapidly over stone and weed, and now flying for a few yards with graceful undulatory motion, cannot fail to be charmed with their beauty and agility.

The Grey Wagtail is a continual resident in all the southern parts of Europe, and is said to be met with in India, Java, and Japan. In our own country it is fairly distributed over most parts, with the exception of the extreme northern counties.

The Grey Wagtail is of a retiring and solitary disposition, seldom being seen except singly or at most in pairs, and apparently eschewing altogether the society of other birds. Its favourite haunts are the sides of running streams, ditches, quarries containing water, ponds and pools, or in fact at any piece of water, if only in a tub; although like other wagtails it may now and then be seen running quickly along the top of some shed or farm outhouse in pursuit of flies or small insects. The food consists of insects, very small water-snails, and the various sorts of minute living creatures that abound on the margins of watery places in general.

The flight of the Grey Wagtail is similar to that of the other members of the family, being light, tolerably fast, and composed of a series of rapid and graceful undulations. The note is not very strong, and may be described as a shrill "tweet tweet," which is repeated in a louder key, and more frequently when the bird is suddenly disturbed and takes to flight. Under any circumstances, however, it seldom flies to any great distance, but soon returns to the waterside as before.

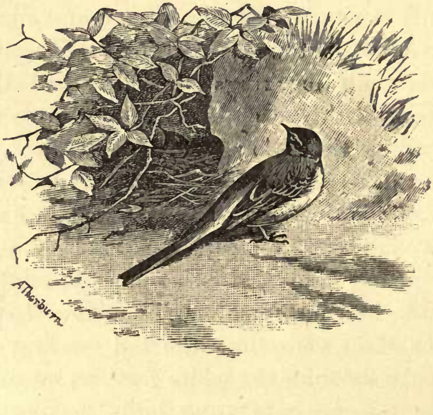
Its favourite nesting place is amongst the grass, or stones, or hollows in banks, and in most cases pretty near the sides of a stream. Instances, however, are upon record of this bird selecting very different homes, such as a greenhouse (passing to and fro through a broken square of glass) or a window-sill; and Morris mentions a case in which the nest was built between some railway switches, within close proximity of passing trains. The nest is constructed of dried bents of hay and grass, fibrous roots and twigs carefully lined with hair, wool, or a few feathers. About six eggs are laid, of a greyish or dirtyish white, with markings of light-grey and brown ; they are of a short oval shape, and vary exceedingly in colour and marking.

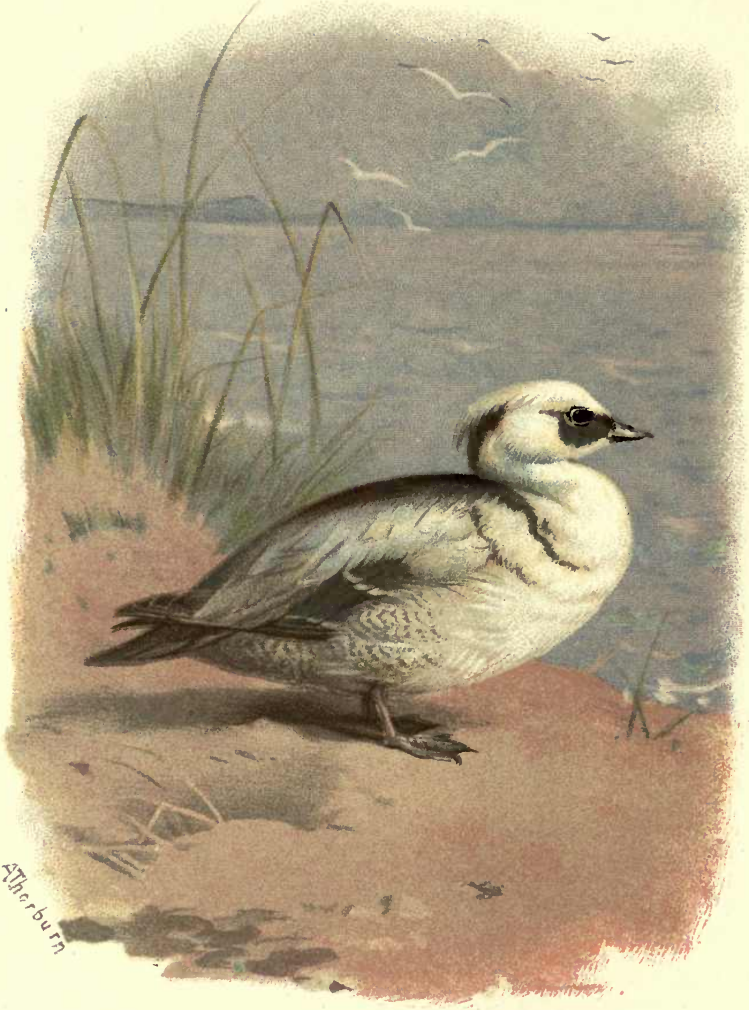
The male bird is about eight inches in length, about half of which measurement is taken up by the tail. The bill is dusky brown; a dark grey streak passes from the bill through the eye. Above the iris is a light buff-coloured mark, and a similar one below; the forehead, crown, back of neck and sides of head are grey, slightly tinged with greenish yellow; the chin and throat are black, edged with white, and buff-white in winter, changing to grey until the beginning of April. The breast, especially the lower part, is a beautiful bright yellow, in winter greyish-white with a faint tinge of yellow; black, grey, and yellowish towards the tail. The wings are dusky black, with markings of white, and the tail is brownish-black, with the outer feathers white; the under tail coverts are bright yellow, and the legs, toes, and claws are of a brownish-yellow. The female is smaller than the male, the throat is tinged with yellow, and in summer the black patch changes to dark grey mottled with yellowish-grey. The young birds do not assume the adult plumage until after the first autumnal moult. They have a very noticeable habit of expanding the tail on first alighting, thereby plainly showing the white feathers on each side.

These wagtails are migrating birds, leaving the north for the south about August or September, and returning about February or March. They are very partial to localities, and the same birds return to the same quarters year after year; they appear to visit certain places at stated times, and can generally be found in a particular spot if their habits are closely studied; they also exhibit extreme pugnacity of disposition, and will readily show fight if interfered with.

It has a peculiar habit of remaining motionless if surprised, and will even allow anyone to pass near it without moving, although immediately afterwards it will fly off uttering its short call note. It is a very nice bird for an aviary, where it becomes very tame, and is universally admired. Under such circumstances it requires plenty of water and the same treatment as a nightingale.

The Grey Wagtail is often called the Dun Wagtail.

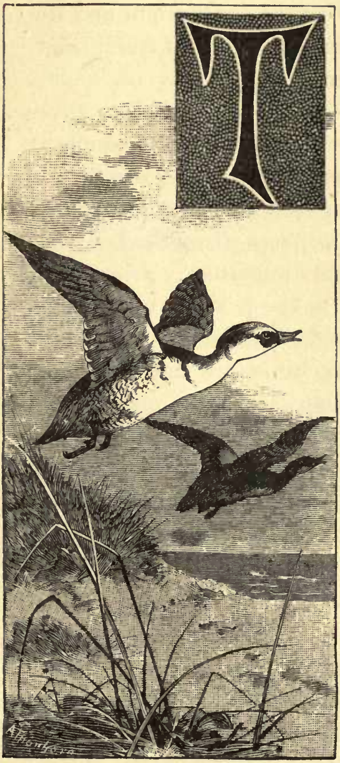




SMEW
(1/4 NATURAL SIZE)

THE SMEW.

Mergus albellus.



THE Smew, or, as it is frequently called, the Smee, is a bird of handsome appearance, the plumage consisting of striking contrasts, and the head ornamented with a plume. It is about the size of the Wigeon.

Smews are winter visitors only, and their numbers vary very considerably. In some winters they are scarce in the extreme, whilst in others they are met with in comparative frequency. Under all circumstances, however, the specimens most commonly procurable are the females and young males, and the latter are generally known as "Red Headed Smews."

In addition to the sea-coast these birds resort to most of the slow muddy rivers, inland lakes, fens, and indeed any large sheet of fresh water.

The eastern coasts of our own country are the parts most usually resorted to; in Germany and Holland the bird is well known, and it is said to be found in France, Switzerland, Provence, and Italy. It has not yet been observed in the Arctic portions of North America, and only very rarely in the United States.

Crustacea, aquatic insects of every description, and the smaller kinds of fish, are the principal items of their diet, and are procured largely by diving.

The Smew is certainly the most accomplished diver and swimmer of its tribe. It seems to be as much at home beneath the water as upon the surface—indeed, the rapidity and ease with which fish are pursued and captured are almost incredible. On *terra firma* its method of progression is slow, awkward, and ungainly: a state of things immediately attributable to the position of the legs, which are placed very near the end of the body. The flight is strong and straight, and the birds are noted for the long distances over which their journeys occasionally extend. Whilst engaged in feeding, and indeed at all times, the Smew is a shy, cautious, and vigilant bird, difficult of approach, and always warily looking out for danger.

In the winter the birds are gregarious, and are met with in small flocks, feeding together for mutual safety.

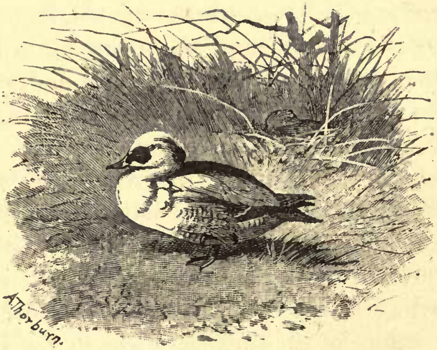
In the spring of the year these birds leave our islands and proceed farther north; they breed in localities situated in high northern or north-eastern latitudes, and at this period of their life very little detailed information is obtain-able about them. The eggs, which closely resemble those of the Wigeon, are of a creamy-whitish colour, finely grained, and slightly glossy—seven or eight are usually laid.

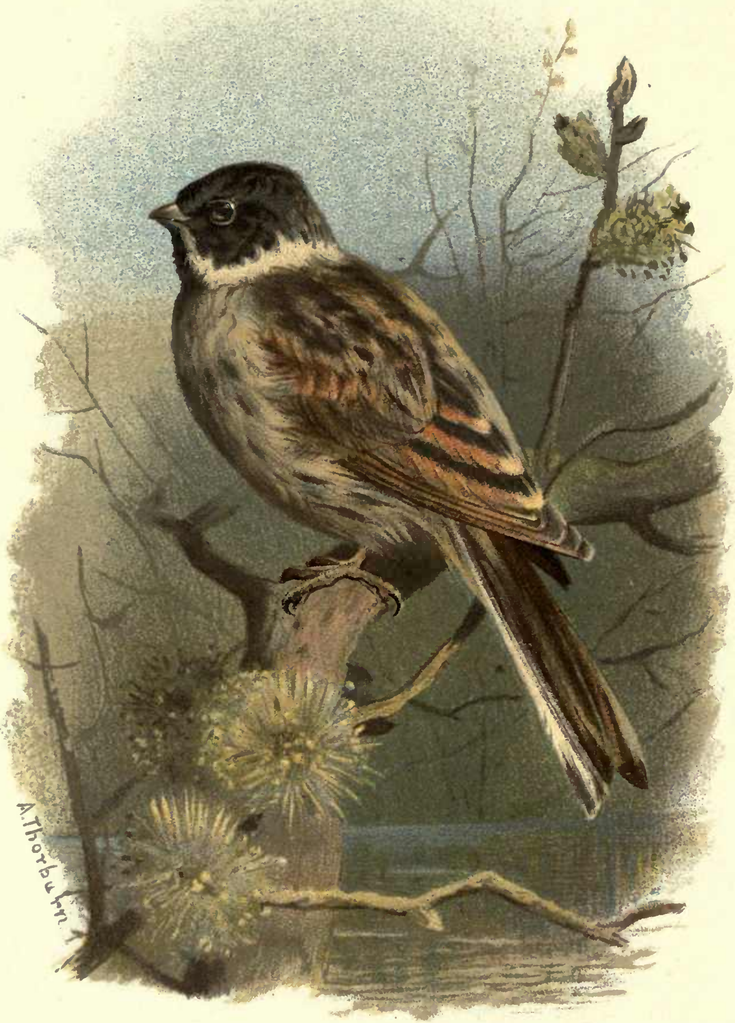
In the adult male the bill is one inch and a half in length, of a bluish-lead colour, and the nail horny and white; the upper mandible is curved at the extremity, and the edges of both mandibles are furnished with saw-like teeth which point directly backward. The irides reddish-brown; at the base of the bill on each side a black patch which just surrounds the eye; from the crown of the head and down the back of it, another dark patch elongated and tinged with green, the dark feathers mixed with others that are white, and all somewhat elongated, forming a crest; the other parts of the head, the chin, and all the neck white; the back black; the rump, upper tail coverts, and tail-feathers ash-grey; the points of the wings greyish-black, with two crescent-shaped lines of black, one before, and one behind the point of the wing; the small wing coverts and scapulars white, the latter edged with black; the great coverts and secondaries black tipped with white, forming two narrow bands of white; the primaries nearly black; tertials ash-grey merging into lead-grey; all the under surface of the body pure white; the sides under the wing and the flanks barred with narrow ash-grey lines; legs, toes, and membranes bluish and lead-grey; the hind toe has a pendant lobe or membrane attached to it. The entire length is about seventeen inches and a half.

Females are considerably smaller than the males, seldom measuring more than fourteen and a half inches. The plumage of the female is different from that of the other sex; the top of the head is reddish brown; the bands of white are much narrower, and the rest of the markings are duller and less contrasted.

Young males for the first twelvemonth resemble the female, the white markings not making their appearance until the second autumn month.

The young females are also some time assuming their complete plumage.

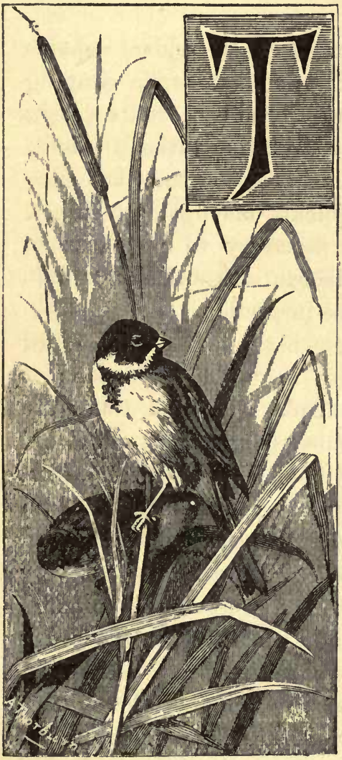




BLACK HEADED BUNTING
(⅔ NATURAL SIZE)

THE BLACK-HEADED BUNTING.

Emberiza schœniculus.



THIS pretty little bird, like many other common members of the feathered tribes, rejoices in a variety of names, such as "Reed Bunting," "Water Sparrow," "Chink," "Black Bonnet," "Passerine Bunting," and "Reed Sparrow," and it is probably far better known under most or the latter of these names than by the one assigned to it by the ornithologist.

The Black-headed Bunting is common in most of the European countries, although in the northern portions of the Continent it is a summer resident only. In the British Isles the same migratory habit is observable, and the birds move "down South" about

October, retracing their journey generally about the following March or April. During the winter months they may always be met with in larger assemblages than during the milder seasons of the year.

The favourite haunts of the Black-headed Bunting are the rushy sides of slowly running streams, the reed beds in ditches and ponds, and indeed any place where water fringed with tall thickly-growing reeds, grass, or rushes can be found.

Its habits are active and sprightly; it seldom remains long in one position, but flits from stalk to stalk, clinging to reeds or rushes, which frequently bend beneath its weight almost to the surface of the water. When disturbed the birds sometimes fly to some distant bend of the stream, but more commonly settle down again quickly amongst the rushes. Some little circumspection is necessary to watch them closely, as they are inclined to be cautious and shy, and do not willingly permit a very close inspection.

The flight is strong and somewhat undulating, the bird flapping its wings several times in rapid succession; it alights abruptly, and plainly displays at such times the white markings of the tail, which is expanded and closed in a very noticeable manner. Small aquatic insects, flies, and the seeds of the various grasses and plants found in their haunts, constitute the principal articles of their diet.

The song of the Black-headed Bunting is not very striking, being nothing more than a couple of sharp notes, repeated every now and again, and usually when the bird is swaying up and down upon some reed or osier twig. Meyer describes the "song" as consisting of the syllable "sherrip" pronounced quickly, a mere chirp of two notes, the first repeated three or four times, the last single and more sharp. It also utters a sharp twitter if compelled suddenly to take to flight.

In building the nest, dry grasses, parts of fine rushes, and dried bents of hay are used, the interior being comfortably and neatly lined with reed-down, thin stalks, moss, or hair. The nest is generally placed on or near the ground, and usually close to the water's edge, amongst coarse grass or sedges, and occasionally in the lowest parts of some convenient bush.

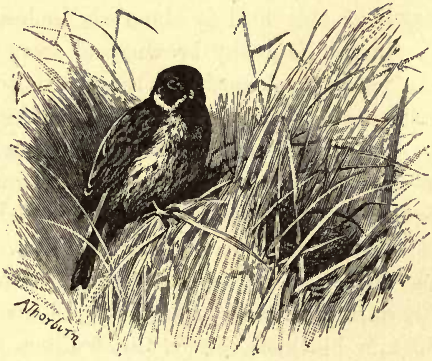
Four or five eggs are laid, about the early part of May, they vary in the colour of the ground tints, being sometimes a pale purplish brown, and at other times purply white, greenish, and brownish; they are prettily streaked and spotted with darker shades of the same colour.

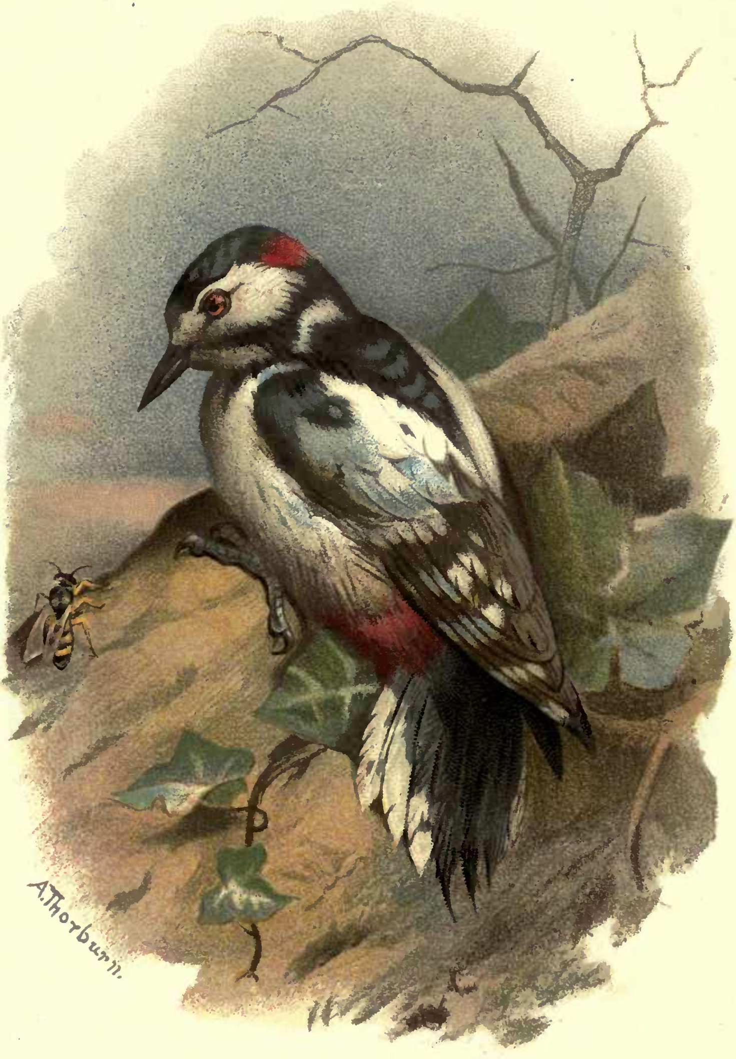
The Black-headed Bunting, like many larger and more pretentious birds, is credited with a strong anxiety for the safety of its young, and has been known to adopt various stratagems and ruses to divert the attention of the too curious and intrusive visitor.

The length of this bird is about six inches, perhaps a little more; the bill is dusky brown, and from the base a white streak passes backwards to the white collar which surrounds the neck. The sides and top of the head are a rich velvety black, bounded by a white collar which comes down to the breast. In the fall of the year, and until the following spring, these white feathers become shaded with grey, and the black ones have brownish tips. Chin and throat black, ending in a downward point. Breast, a dull bluish-white, darker towards the sides, and streaked with brown. Back, a blackish colour, the feathers being bordered with reddish-brown, and mingled with grey. After the autumn moult all these markings become more or less confused. The wings are blackish, with the feathers edged with brown, the longer ones being much darker. The tail, which is a little forked, is rather long and brownish-black, the outside feathers being white. Under tail-coverts are white. Legs, toes, and claws are a dusky brown. The female is smaller than the male, and differs very much from it in appearance. The head is brownish instead of black, the white collar is replaced with plumage of a dusky-brown, and the throat and breast is a dull white.

The young birds resemble the female, but the markings are duller, and the sides of the head are greyish-brown. The black parts of the head do not make their appearance in the young male birds until after the autumn moult, and the white collar increases in distinctness as the birds approach maturity.

It is a handsome addition to the aviary, and may be kept without much difficulty.

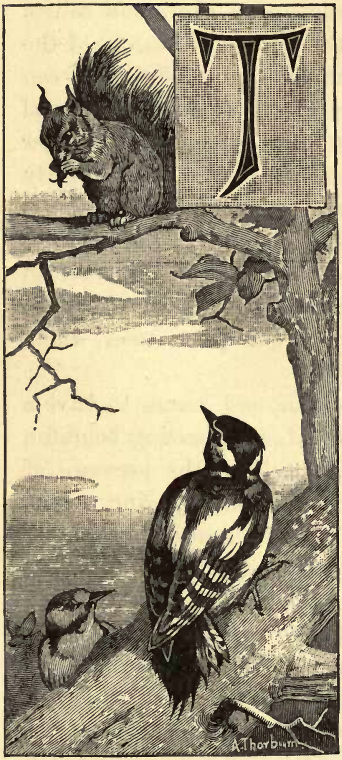




GREAT SPOTTED WOODPECKER
(½ NATURAL SIZE)

THE GREAT SPOTTED WOODPECKER.

Picus major.



THIS interesting bird, although not so frequently met with as the Green Woodpecker, can hardly be called scarce, as it is comparatively common in some parts of England, especially in the midland and southern counties. It is variously known by the local names of "Witwall," "Woodnacker," "Woodpie," "French-pie," and "Great Black and White Woodpecker."

This bird may be considered as one of the best representatives of the Scansores or climbers, and is distinguished by the bill being equal in depth and breadth. The toes are placed two in front and two behind, the nostrils are covered with bristles, and the tail is stiff and rounded. The last-named appendage is continually used in supporting the bird when climbing and in assisting it to maintain its upright position. Like other members of this interesting family, the tongue is long, and is so arranged that it can be protruded to a considerable extent; its sides and tip are furnished with barbed filaments of a horny nature, which serve the purpose of impaling the insects upon which the creature feeds, and this process is further perfected by the copious secretion of a glutinous saliva. Indeed, the entire structure of the bird furnishes one of the most admirable examples of complete adaptability that can possibly come under the notice of the student of natural history. Moving rapidly about on the trunks and larger branches in search of food, the tapping noise so frequently alluded to by poets and describers of woodland beauties is produced by the bird when striking the bark of a tree, either to dislodge the bark, or induce any concealed insects to make themselves visible to their persevering devourer. It is partial to woods, parks, forests, and clumps of trees, where it may occasionally be seen.

The bird is shy in its disposition, and seems to have a strong antipathy to being watched, disappearing behind a trunk or bough directly it finds itself in the presence of spectators. On a still afternoon the sharp jarring sounds of the Woodpecker at work may be heard for a very considerable distance, but it is by no means easy to ascertain the precise locality whence they emanate. The note of this bird resembles the syllable "gich," and this is uttered only once at a time, and at long intervening intervals.

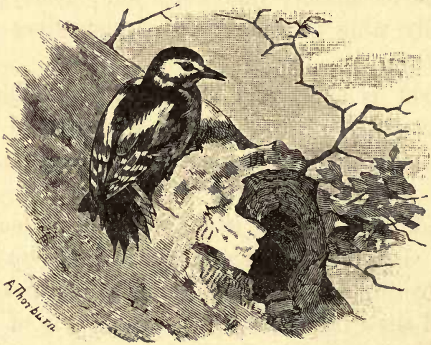
As may be easily imagined, the Great Spotted Woodpecker confines itself almost entirely to an insect diet, eating, with considerable impartiality, spiders, moths, flies, beetles, grubs, caterpillars, and indeed anything and everything of a similar description. According to some naturalists, however, the bird is by no means averse to fruit.

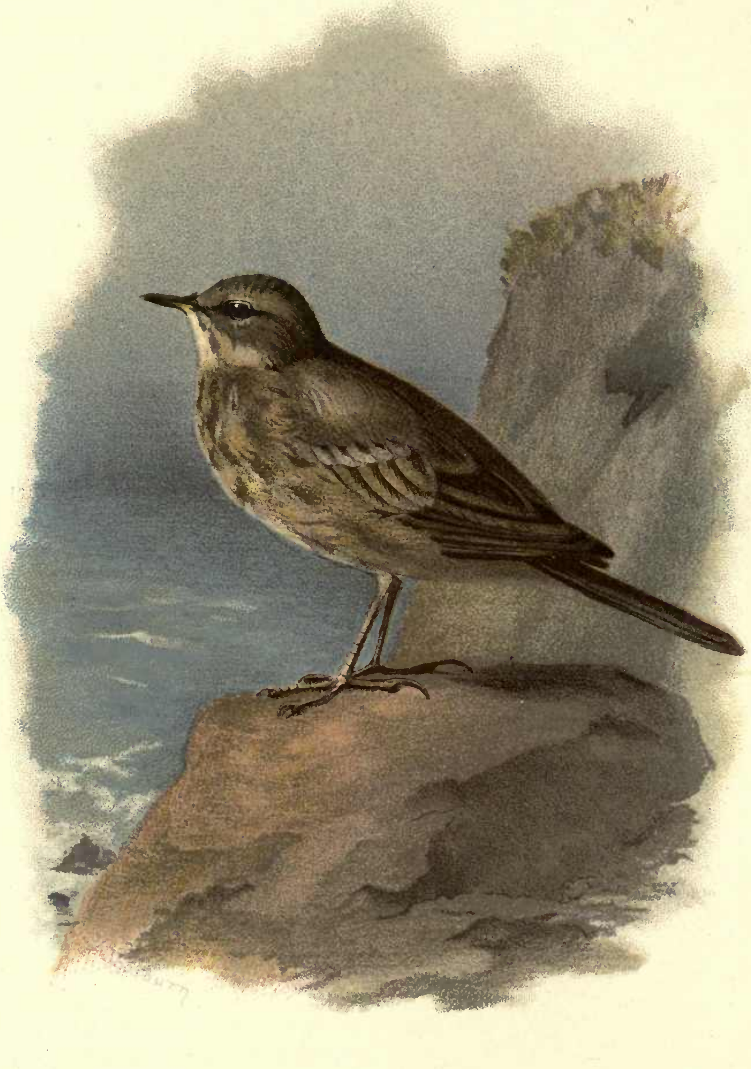
The Great Spotted Woodpecker usually, if not invariably, inhabits holes in trees, and the eggs are deposited upon the decayed and dusty floor of the hole, with no further efforts in the direction of nest-making. Generally a hole is selected extending some couple of feet into the tree. The eggs average four or five in number, and are about an inch in length; they are white, and have a very smooth, glossy appearance. The parents are much attached to their nest and its contents, the female especially showing strong signs of anxiety and affection. The young birds are generally able to take care of themslves about the middle of July.

The flight is short and undulating; the bird is very seldom seen on the ground, and when there its movements are slow, and it generally progresses in a series of hops.

The beak of the adult is about the same length as the head, of a dark shiny horn colour, with greyish bristly feathers covering the nostrils; forehead, ear coverts, and a circle round the eye, a dull, dirty white; top of head, dark bluish black; back of head, bright scarlet; nape of neck, black—this colour passing forward in a stripe to the beak, and backward towards the wings; back, rump and tail coverts, black. The wings are black variegated with white marks, and there is a large, well-defined patch of white on the scapulars. The tail is partly black, some of the feathers being tipped and marked with white. The throat, neck, breast, and belly dirty white; vent and under tail-coverts, red. The length of the bird is about nine and a half inches. The female has no red plumage on the head, and the young birds, although in most respects similar to the old birds, have the top of the head red, and the back part black.

The Great Spotted Woodpecker is found in Denmark, Norway, Sweden, and Russia, and thence downwards to Italy. In our own country it seldom travels far above the midland counties, although instances are recorded of its being met with in Scotland. It is considered probable that in some cases the bird is migratory.

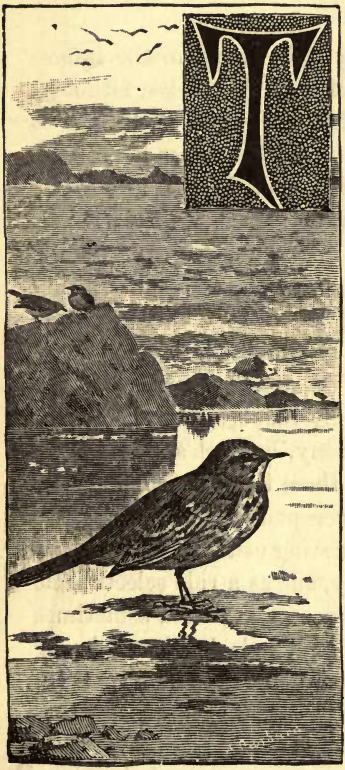




ROCK PIPIT.
(3/5 NATURAL SIZE)

THE ROCK PIPIT.

Anthus aquaticus.
Alauda obscura.



THE Rock Pipit, or, as it is variously called, "Shore Pipit," "Rock Lark," and "Sea Titling," although possessing a general similarity to the Tree Pipit and Meadow Pipit, is somewhat larger and much darker on the throat and breast, whilst its plumage on the upper portions of the body is more of an olive brown.

This bird is well known in all the northern parts of Europe, as well as the more temperate parts, and it may even be met with in Greenland and some other districts of the Polar regions. It is a thoroughly hardy bird, and is additionally interesting from its being, as Morris describes it, "one of our true '*ab origine*' birds."

Its name is no doubt owing to the partiality evinced by it for rocky and hilly places, but it by no means confines itself to these localities, and is very frequently to be met with in spots of quite a different character. It would seem to be especially partial to low, flat, shingly or marshy flats that are now and then covered by the sea; and in these place the bird may be commonly observed diligently seeking for the small marine insects which form a favourite item in its diet.

The Rock Pipit is generally to be found in the immediate vicinity of several more of its own species, although they do not congregate in flocks. When disturbed it seldom flies to any great distance, but contents itself with a short flitting to a more secure spot in the immediate neighbourhood, uttering an uneasy "cheep" of alarm and distrust.

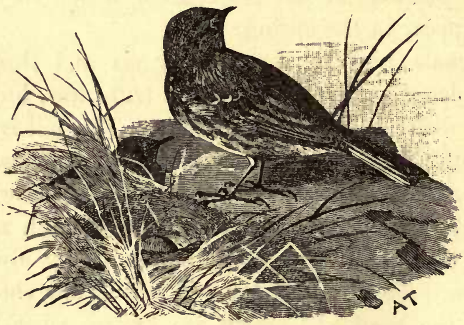
Its food consists of marine insects, worms, and probably some sorts of seeds. The song is not of a very elaborate character, and consists of the single note "cheep" repeated more or less according to circumstances. In the summer time the bird undoubtedly indulges occasionally in a more prolonged effort at harmony, but not sufficiently to warrant the title of songster; there is, however, a cheeriness in his voice that is always acceptable.

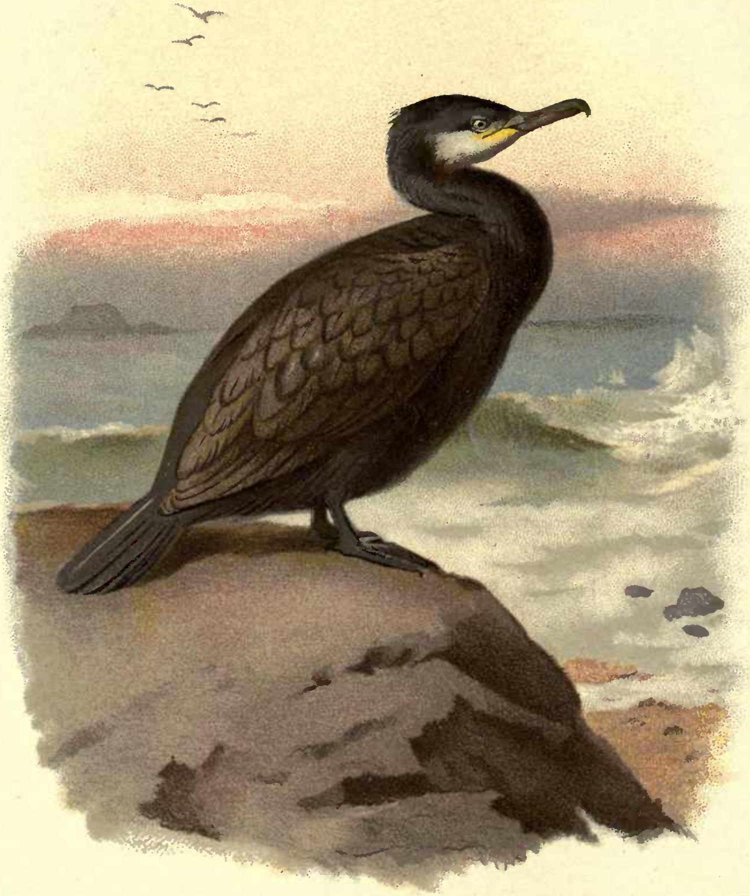
The Rock Pipit commences nesting usually about the end of April or the beginning of May, and as a rule selects some place close to the sea-shore. The nest is placed sometimes on the ground, and sometimes in a hole in the rocks or banks, but almost always in some place protected by some projection or eminence. Dry grass, stalks of sea or water plants, and fine fibres are used in building the nest, which in most cases is lined with wool, fine moss, or hair. The eggs vary in number from four to six, and differ very much in appearance. They are of a pale yellowish or brownish-white, spotted with brownish-red, the markings being thick and run together at the larger end. Occasionally, however, the eggs are almost entirely brown, and at other times they may be seen of a greenish-grey colour with a streak at the thicker end. The surface of the eggs is dull and devoid of polish.

The Rock Pipit, although not a migratory bird, is certainly given to extensive movements in our own country, for the birds are regularly found in the autumn and winter on many portions of the coast, from which they as regularly disappear in the spring.

The male bird is very nearly six and three-quarter inches in length, and the female a trifle less, but there is no great difference in the plumage. The bill is dusky in colour, both upper and lower mandibles being yellowish at the base; iris, a deep brown; a narrow whitish or yellowish-white streak runs over the iris, and another beneath the hinder part; in some birds the upper streak is not always very easily seen. The base of the bill has a few short bristly feathers; the head and crown are brown, slightly tinged with olive; the neck on the sides is a greenish-white streaked with brown; and the back is pretty much the same as the head. Chin and throat a dull yellowish-white, the latter streaked with brown; breast, a dull greenish-white with brown streaks and spots, turning lower down into a yellowish-white with fewer streaks; the sides are olive-brown; the back is a dull greenish-brown, the centre of each feather being dark brown. The tail is rather long, and extends about an inch and a half beyond the closed wings; it is dusky in colour, and the outside feathers are webbed with white, the central feathers being shorter than the others. The wings are dusky, edged with pale olive. Legs and toes, reddish-brown; claws black and curved, especially the hinder one, which is longer than the rest.

The pretty olive tinges in the plumage at some seasons of the year change to a greyish tint.



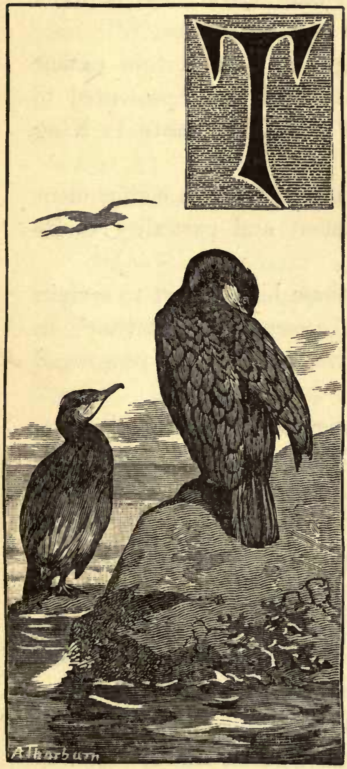


CORMORANT.

(1/7 NATURAL SIZE)

THE CORMORANT.

Pelecanus carbo.



THIS bird is variously known as the Great Cormorant, the Black Cormorant, etc., and is of very peculiar appearance. It is well distributed over Great Britain, and is a well-known *habitué* of all the wild and rocky portions of our sea-coasts.

The Cormorant closely resembles in general appearance the Shag, or Green Cormorant, and no doubt the two birds are frequently mistaken the one for the other. The bird under description is, however, larger, blacker in plumage, and possesses one or two other characteristics not observable in the Shag.

The Cormorant is popularly supposed to be possessed of unusual intelligence, and it has for a long time been used in some of the Eastern countries to catch fish for its owners. Yarrell states: "The Chinese are said to use them at the present time; the bird is taken to the water-side, a metal ring or leather strap, by way of collar, is put on his neck, and he is then set at liberty to catch a fish, which he brings to hand when called, a small cord being attached to him while in training, to insure his return. Having satisfied the wants of his master, the collar is taken off, and the bird is then allowed to fish for himself."

This practice was also indulged in to a certain extent by our ancestors, as Pennant speaks of one "presented to him by Mr. Wood, Master of the Cormorants to King Charles I."

The bird is very easily domesticated, and in confinement speedily shows signs of attachment and partiality to its owner.

During the breeding season these birds resort to certain stations, and at these periods congregate sometimes in large numbers, appearing to live together in peace and harmony.

The flight is rapid and strong, and very near the surface of the water. They swim and dive with great ease, and are capable of remaining beneath the water for some considerable time. Indeed, the distance accomplished by the bird in these subaqueous journeys is almost the first thing that excites the wonder and admiration of the observer.

The nest is large, and made up of sticks, seaweed, and long coarse grass; the higher parts of rocks and cliffs being the localities generally preferred.

Four, five, and even six eggs are laid, chalky-white in colour, varied with pale blue; the surface of the shell is rough, and the egg is similarly shaped at each end. In proportion to the size of the bird, the egg is small.

The bird feeds on fish, and, as already stated, is a skilful and successful fisher. Its appetite is voracious, and it not unfrequently pays a heavy penalty for its want of discrimination. Several instances are recorded in which the Cormorant has transfixed an eel with the lower mandible, and, not being able to kill or disengage its prey, has been strangled by the fish twining itself round its captor's throat.

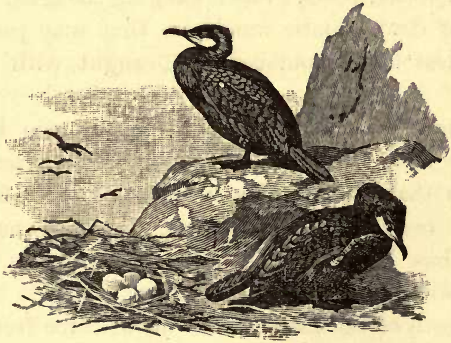
Besides pursuing its food in the water the bird often perches on rocks, posts, or overhanging boughs, where it watches for stray aquatic wanderers that may pass. Any such luckless fish is pursued and caught with unerring certainty.

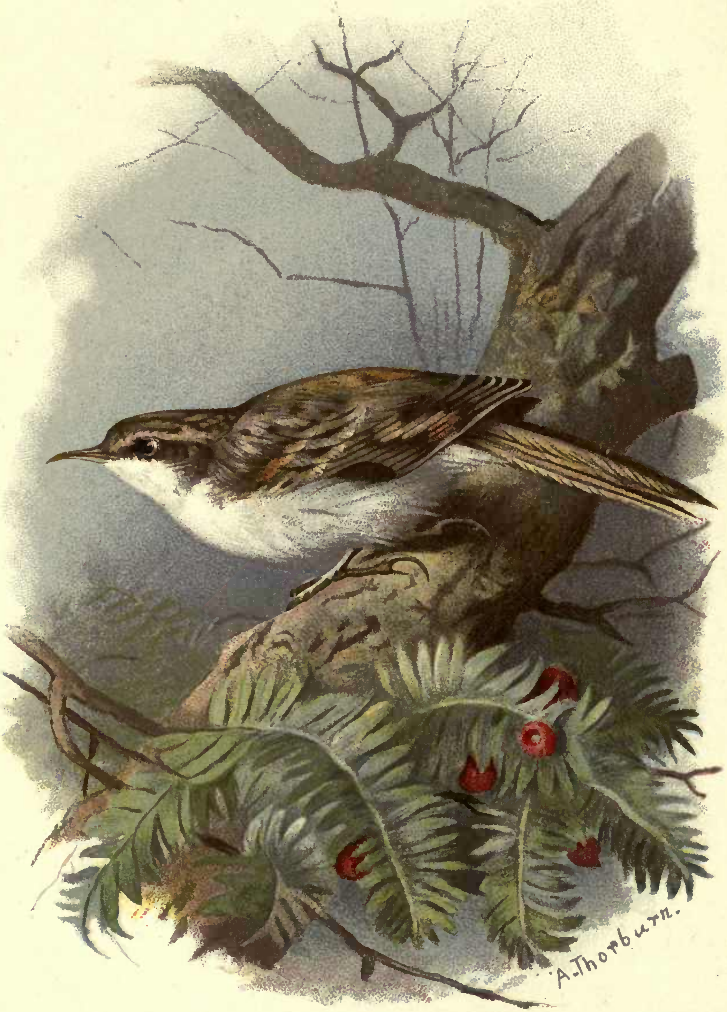
Although generally speaking an oceanic bird, the Cormorant is no stranger to fresh water; rivers, lakes, and ponds that are abundantly supplied with fish being commonly resorted to. According to some naturalists, the bird has been met with on the Chinese rivers a thousand miles from the sea-shore.

The length of the male bird is about three feet; in the spring and early summer the bill is pale brown, the point horny, hooked, and sharp; irides green; forehead, crown, nape and part of the neck black, mixed with many white, hair-like feathers; the black feathers on the back of the head elongated, and forming a crest; the back and wing coverts dark brown, the feathers margined with black; quill feathers and tail black; lower part of the neck all round, with the breast and all the under-surface of the body, a rich velvet-like bluish-black, except a patch on the thigh, which is white; the legs, toes, and membranes black. The shape of the foot is peculiar, the outside toe being the longest, and the inner one the shortest; the middle toe is serrated on the inner edge; the tail is stiff and rigid.

The female is the smaller bird, but her crest is often longer than that of the male.

The young birds are dull brown, the plumage in places being mottled with white.

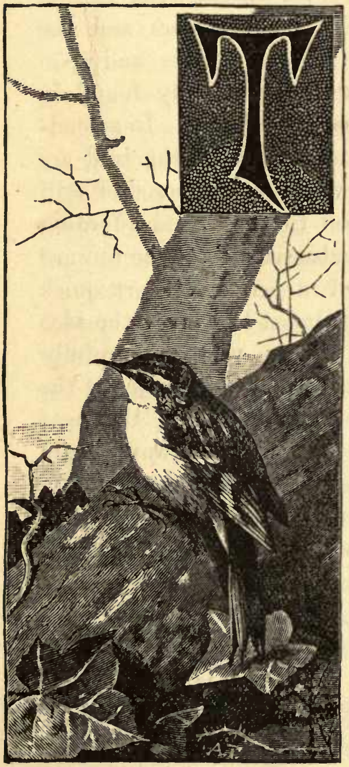




CREEPER
(2/3 NATURAL SIZE)

THE CREEPER.

Certhia familiaris.



THE Creeper is one of those birds whose habits and general disposition are such as to suggest a greater degree of rarity than really corresponds with facts. It is known generally as the "Tree Creep," or "Tree Climber," and is found more or less in all parts of the British Islands. Russia, Norway, Denmark, Sweden, Germany, and Italy, are also mentioned as countries in which this little bird is commonly met with.

The Creeper is wonderfully active and industrious, and is seldom seen unless engaged in procuring food either for itself or its progeny. It is very shy and retiring, and as soon as it becomes aware that it is the subject of inquisitive examination, it very quickly places the entire thickness of the tree on which it may be at work between itself and the too curious observer. In addition to its shyness, the Creeper's plumage is very sober and unobtrusive in its character, and closely resembles in colour the rough ashen-brown bark of trees, so that were it not for the piping "twee-twee" that it so frequently utters, it would be very difficult indeed to discover its whereabouts.

The Creeper feeds principally upon spiders and the various insects that abound in the bark of trees, and upon the caterpillars and beetles that are commonly found in trees, or upon old fences and wooden buildings. In ascending the trunk of a tree the movements of the bird are rapid and continuous, the tail, which is composed of stiff feathers, being curved down upon the bark, and affording its owner considerable support and assistance. The upward progress of the bird consists of a series of short quick movements—so quick, indeed, as almost to convey the idea of sliding over the surface. Every part is carefully scrutinised, and when the search, which terminates at the top of the tree, is concluded, it quickly flits to the next tree and recommences its labours, which always begin at the base and terminate at the top. The flight is undulating, and very seldom sustained for any great distance.

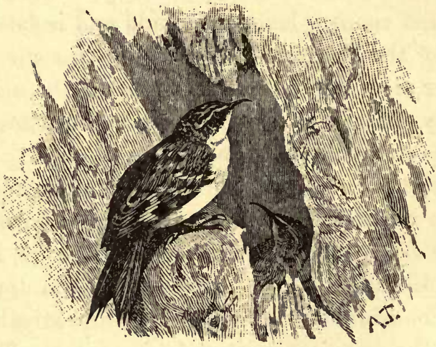
The nest of the Creeper is usually placed in some crack of a tree, or some sheltering inequality in the bark, and is built of dried grass, straws, twigs, and fibrous roots, lined with feathers and wool. Occasionally it is found in some crevice of a woodstack. The nest is a handsome little structure, and well worthy of notice; very frequently the crevice selected is too large for the intended domicile, and the superfluous space is cleverly filled up with a quantity of very fine twigs. The number of eggs varies from four or five up to seven or eight. They are of a white colour, spotted — sometimes at the thick end, and sometimes all over—with reddish, or reddish-brown. The young ones are hatched in about a fortnight, and generally make their appearance about the beginning of May. The Creeper rears two broods in the year, according to Naumann; but the second brood is not so large as the first, usually numbering from three to five.

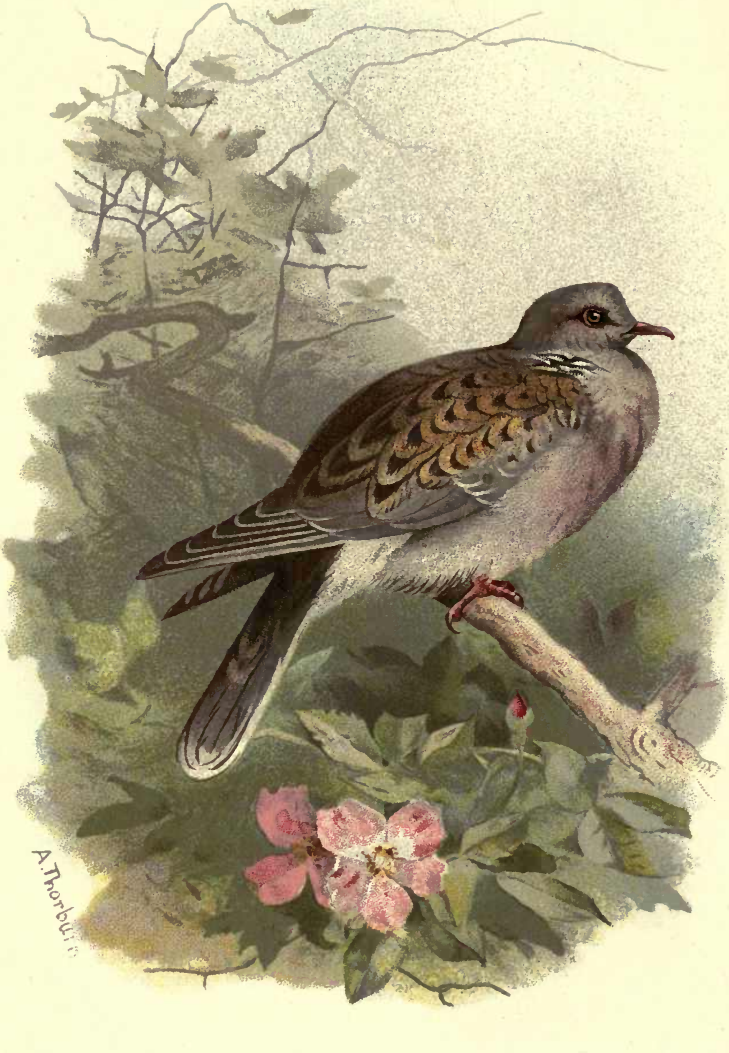
Woods and plantations are the common resorts of the Creeper, but it may be seen very often by the careful observer in those quiet country lanes where old and isolated trees are found along the hedgeside. According to some authorities the Creeper may be observed, usually in the morning and evening, by the side of watercourses and ditches, either for the purpose of drinking or bathing.

The length of this bird is from five to five and a quarter inches; the bill is long, slender, and curved downwards, the upper part being ridged and larger than the lower; the lower mandible is a dull yellowish-white, the upper, dusky-brown. The irides are brown, and a white streak runs over the eye to the nape, where it ends in a spot. The sides of the head, the crown and neck, are brownish-ash colour, with dull white spots and markings of a yellowish shade; a dusky streak runs backwards from the eye. Chin and throat are white; breast, a soiled silvery-white, yellowish on the lower part and the sides. Back resembles the neck. The wings are dusky, the feathers of the coverts being tipped with white. A band of yellowish-white runs across a portion of the wing, which forms a straight line when the wing is extended, and a wavy mark when it is closed.

The tail is a reddish or brownish ash colour, yellowish towards the outer edge; upper tail coverts are tinged with tawny rust colour; the under tail coverts, reddish-yellow tipped with white. The legs, toes, and claws are pale yellow-brown; the claws are very long and much curved.

The female resembles the male in size and plumage.

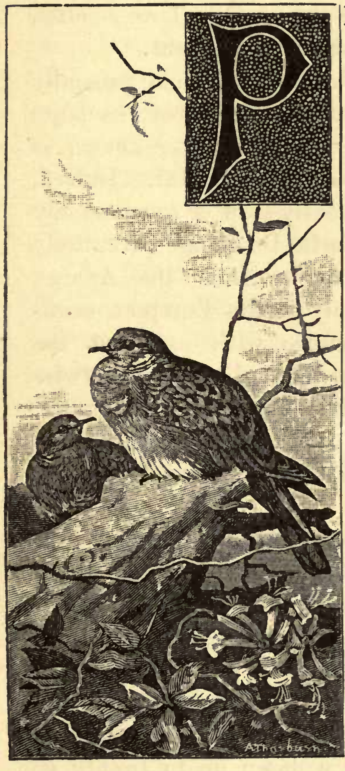




TURTLE DOVE
(2/5 NATURAL SIZE)

THE TURTLE DOVE.

Columba turtur.
Turtur auritus.



PERHAPS no bird, either in this country or elsewhere, is so inseparably connected with pleasing and sentimental associations as the Turtle Dove.

Its strong unswerving attachment to its mate, its gentle confiding disposition, and elegant appearance, have been from time immemorial the admiration of mankind. These pleasing characteristics have furnished unfailing themes and apt similes for the poet, the preacher, the philosopher, and the moralist; whilst the numerous records of its gentleness and conjugal devotion are thoroughly well known to everyone, and have long since become proverbial.

Notwithstanding this

pleasing list of excellences, it must be confessed that at times the deportment of the Turtle Dove in captivity is subject to some considerable variations. In an aviary it frequently becomes quarrelsome and apt to bully and drive the smaller birds away from their food; and even when more than a pair are kept together without any other sorts of birds violent quarrels will take place between them, and the weaker bird is often subjected to harsh and unneighbourly treatment.

Owing to the fact that the Turtle Dove is more generally kept in confinement than any other member of the large family to which it belongs, it is much better known as a domestic pet than as a Familiar Wild Bird. Indeed, as a wild bird it is not so frequently seen or so commonly known as may be imagined. Turtle Doves are of entirely migratory habits, travelling to us from the African Continent, and also visiting many of the European countries. They make their appearance with us about the beginning of May, although the forwardness or otherwise of the spring affects their movements to a great extent, and some remain in this country until the end of September. In the order of their migration the males usually precede the females.

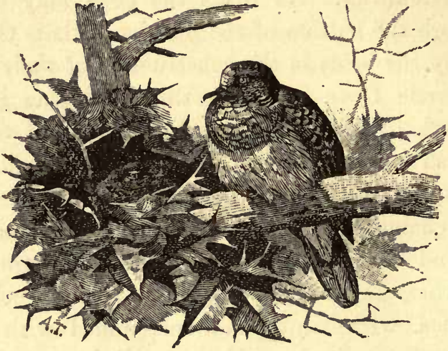
The food consists of the various sorts of grain, peas (to which they are extremely partial), and seeds of all descriptions. They invariably feed upon the ground, and are constant visitors to large open tracts of freshly-sown land. Cornfields that border upon small or large streams are very favourite haunts, the birds being fond of drinking and bathing. They usually feed and go about in small flocks varying in numbers from half a dozen up to twenty or more, and at the close of the day's foraging they retire to roost amongst the higher branches of trees. The flight is easy, buoyant, and rapid.

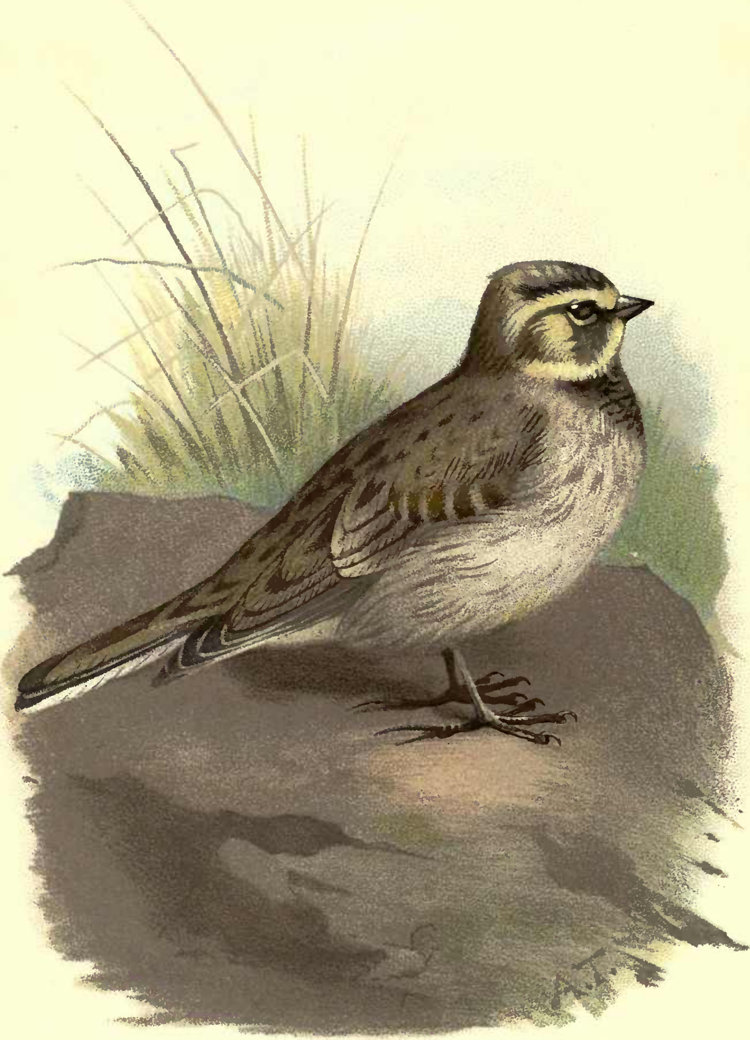
On their first appearance they do not seem to be particularly shy, but as the nesting operations proceed they become much more cautious, and are then approached with difficulty. The nest is a rather slovenly structure. It is composed of twigs and sticks carelessly put together in a tree, and not very far removed from the ground, seldom more than fifteen or twenty feet, and sometimes not more than four feet. The eggs are pure white, and of a very shiny, polished appearance. They never exceed two in number, and are of a long oval shape, with slightly pointed extremities. At times the eggs may be plainly seen through the bottom of the nest, so little is the trouble bestowed by the birds in the construction of their home.

The Turtle Dove is nearly thirteen inches in length, the bill dark greyish-black, much flattened in the centre, and reddish on the inside; iris bright yellowish-red, the bare space around it light red; sides of the head yellowish, changing to pink on the neck and breast; back of neck and crown light greyish-blue; on the sides of the neck there is a rounded patch of black, each feather being tipped with white and surrounded with a bluish tinge; in front it is a delicate light purplish red, fading into grey; chin pale brown; back greyish-brown above, and brownish on the lower part. The tail is long and much rounded; it is greyish-brown, many of the feathers being tipped with white. The wings are brownish- and greyish-brown, with markings of black in the centre of the feathers; the under wing-coverts are grey, and the under tail-coverts white. The legs and toes are red, and the claws blackish-brown.

The female is of a rather lighter appearance than her mate, and as a rule not quite so large, but the sex is difficult to distinguish. The young birds are at first covered with a soft yellowish down, and the full plumage is only gradually obtained, not completely until their second year.

The note of the Turtle Dove closely resembles the syllables "Tur-tur" repeated more or less rapidly—a circumstance to which its name may be no doubt attributed.



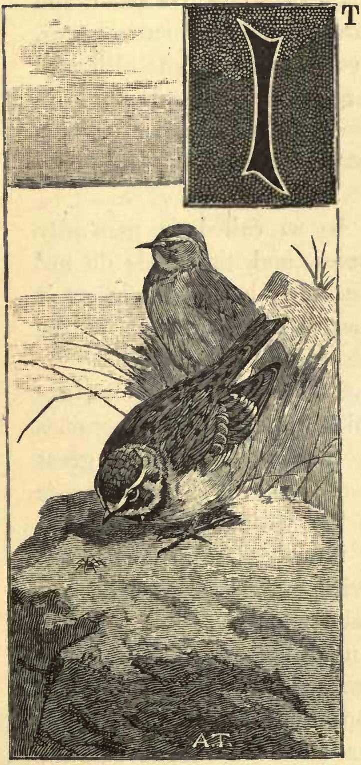


SHORE LARK.

(3/5 NATURAL SIZE)

THE SHORE LARK.

Alauda alpestris.
Alauda cornuta.



IT is a very regrettable circumstance that the appearances of the Shore Lark in this country should be so few and far between, as it is an active and sprightly bird, interesting in its habits, and handsome in plumage. In Mr. Morris's well-known work on "Birds" only four instances are enumerated in which it had been met with in Great Britain, but doubtless, as with many other songsters of reputed rarity, its extreme scarceness may more properly be attributed to the laxity of ornithological observation than to actual fact.

The Shore Lark may be met with almost every year in the neighbourhood of Brighton, also about Dover, and some parts of Norfolk; and very probably it visits several other localities with more or less regularity that have hitherto escaped the cognisance of the naturalist. But be this as it may, it cannot be denied that the bird is rarer and much more sparingly distributed than could be wished.

The Shore Lark is found in the largest numbers in North America, especially on the colder shores, and it is also said to be seen in the northern parts of Europe and Asia. According to Temminck, it breeds in Holland, and remains in that country throughout the entire year. The bird is hardy in its constitution, and although compelled by severe weather to move southward in search of milder quarters, as soon as the summer appears it immediately retraces its steps towards the cold and barren coasts of the far North.

Its migration, if it may be so called, is generally accomplished in small companies, and the birds do not undertake long journeys at a time, but straggle, as it were, from one place to another as the exigencies of the weather may necessitate.

The Shore Lark is somewhat shy in its habits, except during incubation, at which time the bird becomes bolder. After the brood is hatched it evinces great anxiety and solicitude for its offspring. The parent is said to be quite an expert in the various ruses adopted by many birds for decoying intruders from the nest, fluttering along the ground with assumed lameness, and continually uttering a low plaintive cry.

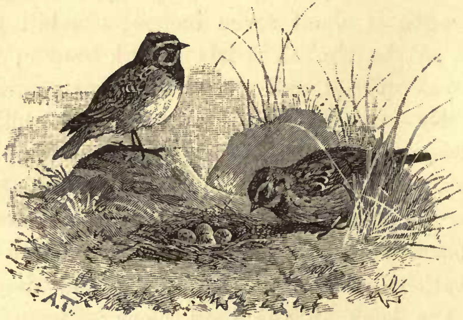
The nest is always placed upon the ground, and is not easily discovered, as the materials used in its construction are of the same colour and appearance as the surrounding ground; it is circular in shape and built of fine grass. Four or five eggs are usually laid, which are of a greyish-white, with spots of palish-blue and brown. Mr. Audubon says that when the young birds are hatched, or rather when they are fledged, and before they are able to fly strongly, they leave the nest and follow their parents on the ground, separating when pursued, and each one endeavouring to conceal itself in the mossy herbage that surrounds their home. On these occasions the young birds make use of their wings to help them in their progress, and succeed in making themselves scarce with wonderful celerity. If pursued for any length of time the old birds follow the intruder overhead, loudly protesting against and lamenting the proceedings.

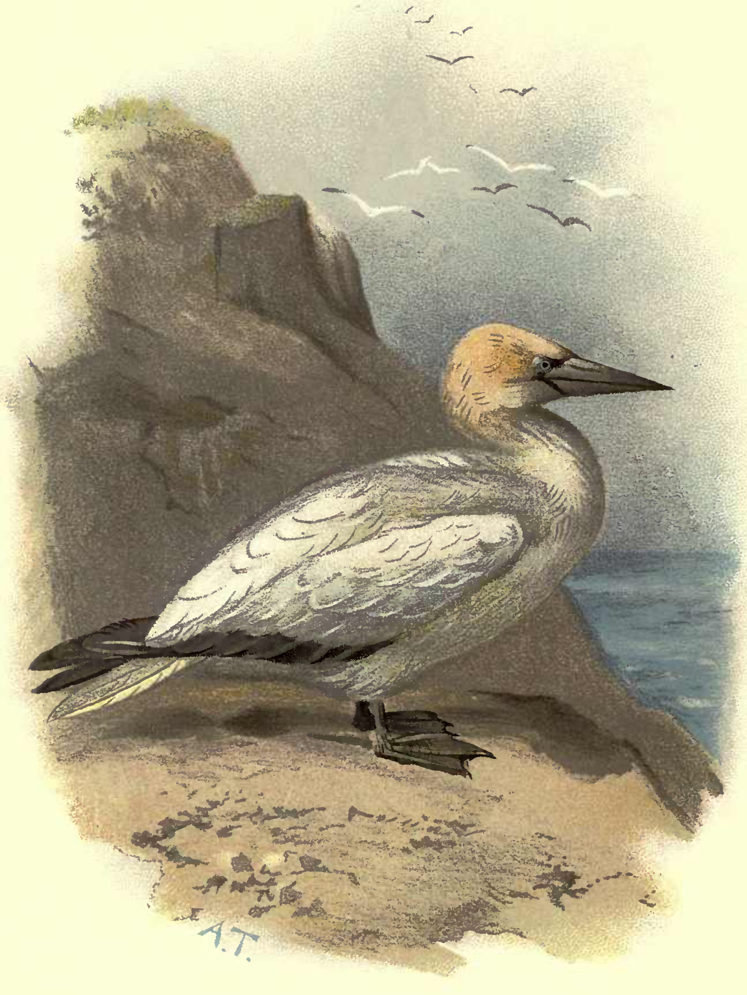
It has been already stated that the Shore Lark is said to breed in Holland, but the favourite nesting-places of this bird are to be found in the rocky sterile regions of the North, particularly where broad barren tracts of rocky land extend inland from the coast, and where moss, lichen, and scanty growths of grass are the only signs of vegetation.

The length is about seven inches; the bill is bluish, and black at the tip. The iris is dark brown; there is a yellow streak over it, and the nostrils are protected with a few bristly feathers. From the base of the bill a streak of black passes to the eye and spreads out behind it. The forehead is yellow, changing after the autumnal moult to a greenish-ash colour; on the front of the crown there is a broad black band, ending on each side with a few long pointed feathers which the bird raises and depresses at pleasure; the back of the head black; crown, greyish-brown. Back of neck greyish-brown, tinged with red; chin, throat, and sides of neck a beautiful pale yellow, white in summer; breast a pale yellow, with a collar of black across the upper part, turning in the winter to a dusky-brown; the lower part of the breast dull white, and towards the sides reddish-brown. Wings dark-brown with markings of reddish-brown and white. Tail black, the outer feather on each side being partly white, upper tail-coverts brown; lower ones, dull white. The legs, toes, and claws are bluish-black; the hind claw is longer than the toe, and very nearly straight.

The female is not quite so large as the male. The streak over the eye is pale yellow; the band across the breast is brownish-black fringed with yellow, and the marking of the plumage generally is not so bright or well defined.

The song of the Shore Lark is variable and short, but sweet in tone, and usually uttered when the bird is flying. The bird is not at all difficult to keep in confinement, as a specimen that was caught near Brighton some time ago was placed in an aviary and lived there for more than five years.





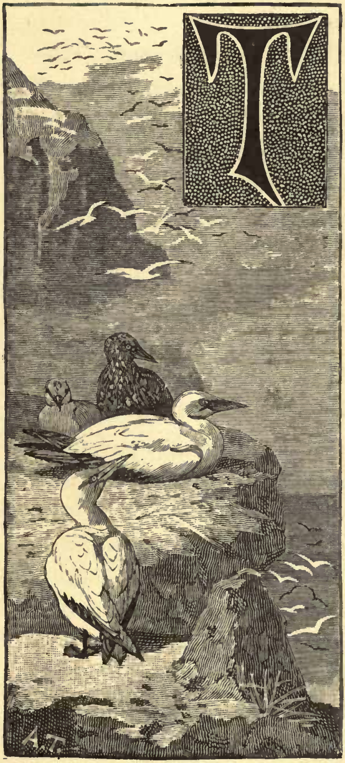
GANNET.

(1/7 NATURAL SIZE)

THE GANNET.

Pelecanus bassanus.

Sula bassana.



THE Gannet, or Soland Goose, is one of the largest birds inhabiting the coasts of Great Britain. It remains with us throughout the entire year, but shifts its locality according to the varying seasons. Enormous numbers of Gannets congregate at various well-known localities during the spring and autumn. The most noted breeding stations are Lundy Island (one spot there being known as Gannet Cove), the Skellig Isles, the Isle of Ailsa, St. Kilda, in the Outer Hebrides, Souliskerry, near the Orkneys, and the famous Bass Rock, in the Firth of Forth. At these spots, at the seasons above indicated, Gannets may be seen in thousands.

Seebohm says, "The scene is a most imposing one. Thousands of Gannets are sailing to and fro before the mighty cliffs; every part of the rocks that can support a nest is crowded with birds; birds are constantly coming to and leaving the cliffs; the harsh notes of quarrelling Gannets sound in all directions; whilst numbers are to be seen sitting quietly on the greensward on the top of the rocks, or fast asleep, with their bills and heads almost hidden amongst their dorsal plumage."

After the autumn, these birds move towards the southern parts of the coast, and are then seen, especially off the Cornish shores, in great abundance.

The Gannet feeds entirely upon fish, more especially upon those that swim near the surface of the water, such as sprats, pilchards, and herrings. The method in which it secures its food is quite different from that pursued by any other of our fish-eating birds. Mr. Couch (in his *Fauna*) observes that the Gannet, "traversing the air in all directions, as soon as it discovers the fish it rises to such a height as experience shows best calculated to carry it by a downward motion to the required depth; and then partially closing its wings, it falls perpendicularly on its prey, and rarely without success; the time between the plunge and immersion being about fifteen seconds."

The Gannet is possessed of very considerable powers of flight, and ranges over a large extent of sea in search of food, from one hundred to two hundred miles in a day being frequently traversed.

During the fishing season these birds boldly approach the fishermen, and are frequently caught by becoming entangled in the nets.

The nest of the Gannet is merely a large mass or collection of seaweed or grass; only one egg is laid, which is about three inches in length and nearly two inches in breadth. The colour is a chalky-white, very slightly tinged with pale blue. It does not long retain its original colour, but soon becomes soiled and dirty. The young birds shortly after being hatched are covered with a white down; this grows very quickly, and gives the birds somewhat the appearance of large powder-puffs or lumps of cotton.

Gannets are very quiet and easily approached during the time of incubation; and in many places, where they are not annoyed or interfered with, will allow themselves to be approached and even handled without quitting the nest. Sometimes, however, they betray some irritation at being disturbed, and assume a threatening attitude by widely opening their beaks.

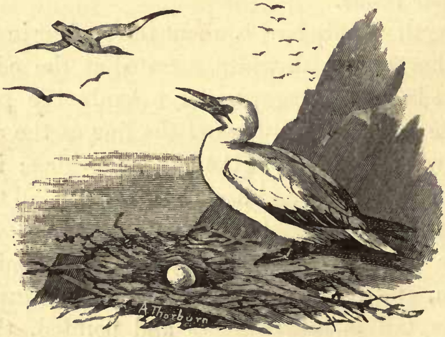
The length of this bird is about thirty-four inches; the bill is of a horny greyish-white, serrated at the edges, very large at the base, and compressed towards the point; the angle of the gape extends beyond the line of the eye; face and throat naked, the skin of the face being blue; irides pale straw colour; the head and neck buff colour; all the rest of the plumage white, except the wing primaries, which are black; the line of the bones of the legs and toes in front green, the remainder, with the membranes, nearly black. The tail is rather short and pointed, the centre feathers being the longest.

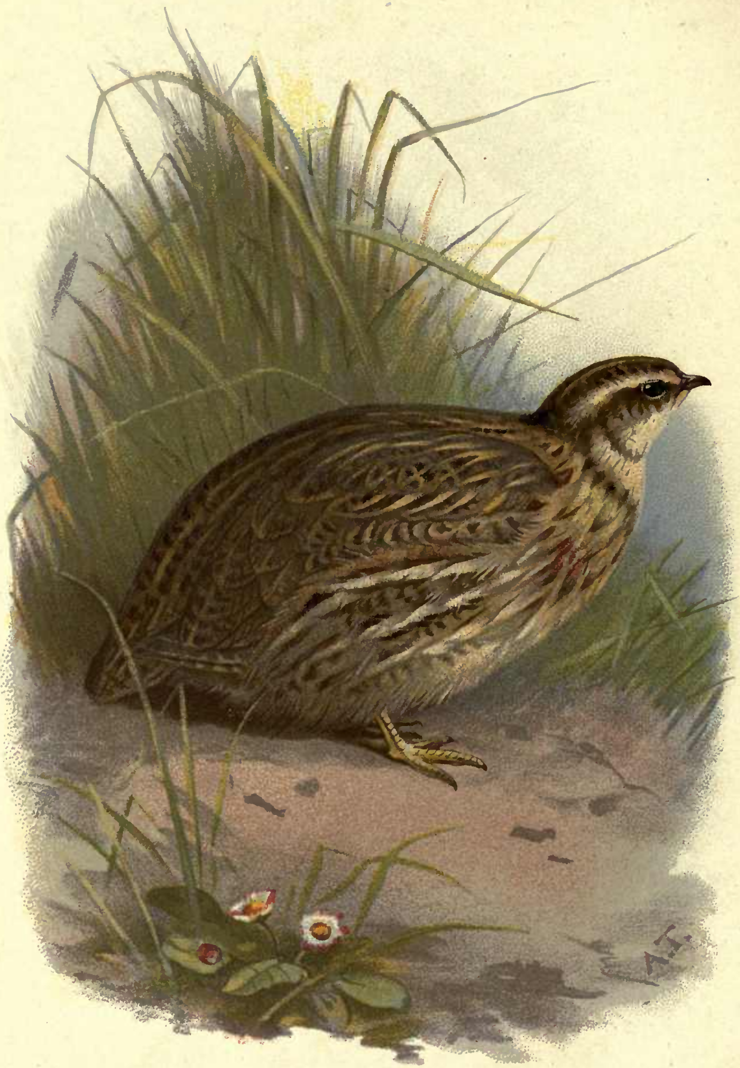
In the young Gannet the beak is almost black; the skin of the face bluish-black; the general plumage is black, varied with lines and triangular marks of white. This gives the bird a strong resemblance to the young of the Red-throated Diver.

The note of the Gannet is a harsh discordant croak, resembling the syllables *carra* often repeated, and modified in different ways, it is most usually heard during the breeding-season or when the birds are fishing or disturbed.

It is stated that the Gannet requires four years to arrive at maturity, and that until the bird has attained this age it does not breed.

They are easily kept in confinement if taken from the nest, and will become very tame, but are very expensive to keep, as the quantity of fish they consume is something enormous.



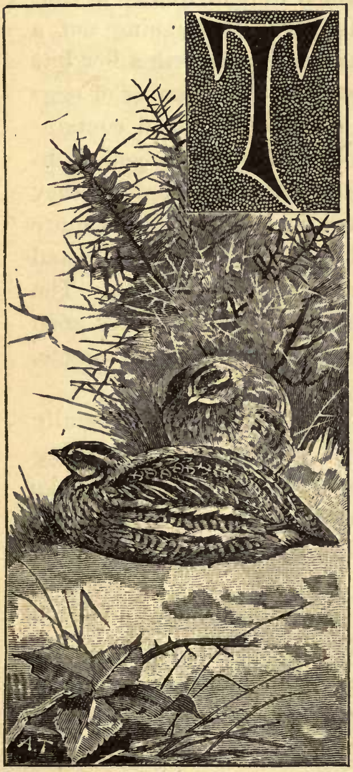


QUAIL

(3/5 NATURAL SIZE)

THE QUAIL.

Perdix coturnix.
Tetrao coturnix.



THIS well-known bird was formerly much more common in Great Britain than it is at the present day; indeed, less than a century ago, the Quail was regularly found in great abundance in many parts of the country where now its appearance is considered a rarity. In Ireland it is said their numbers have shown no signs of diminishing. In Scotland they have never been common. Yorkshire, Norfolk, Berkshire, Lincolnshire, Surrey, and Devonshire may be mentioned as places in which they are met with more frequently than elsewhere.

At one time the Quail was regarded purely as a summer visitor, but numerous instances are recorded of their having been shot in this country during the winter, so that their migratory habits are certainly not universal.

In its general appearance this bird may be described as a "partridge in miniature." The male is occasionally polyamous. The note (which is confined to the male bird) is a shrill whistling cry rapidly repeated three or four times in succession.

The Quail does not spend much time or trouble in constructing a nest, but contents itself by scraping out a small hollow in the ground, and placing therein a few bits of hay, straw, dried grass, and stalks. The number of eggs laid is about ten, but nests are occasionally found containing a larger number. The colour of the eggs is yellowish-white, or greenish, blotched and speckled with brown; they measure a little more than an inch in length, and not quite an inch in breadth. Wheatfields, or patches of clover and grass, are the places usually selected for nesting in. The young birds are able to follow the old birds very soon after they are hatched, and feed upon grain, seeds, insects, and small tender leaves.

The flight of the Quail is straight and rapid. Generally the birds keep very close to the ground, and after being fired at or alarmed once, show great reluctance to take wing a second time. They are very fond of frequenting stubble-fields, and many are killed by the sportsman when in search of partridges.

The flesh of this bird is delicate in flavour, and much esteemed as an article of food. Enormous quantities are sent to this country from France, and find a ready sale in our markets and poulterers' shops, generally after a course of fattening in England.

But although the Quail is not a common bird in Great

Britain, it is found in the south of Europe in numbers that are said almost to defy calculation. In the month of April these birds arrive from Africa on the islands of the Grecian Archipelago in "countless thousands," and Yarrell states "that as many as one hundred thousand have been taken in one day on the west side of the kingdom of Naples." In these migratory flights, which are performed during the night, the males arrive first, and it is stated that amongst the large numbers sent to us annually by the French bird-dealers, and in the first lots, there are more males than females. In captivity these birds feed freely, and rather rapidly. They are particularly partial to hemp and millet seeds.

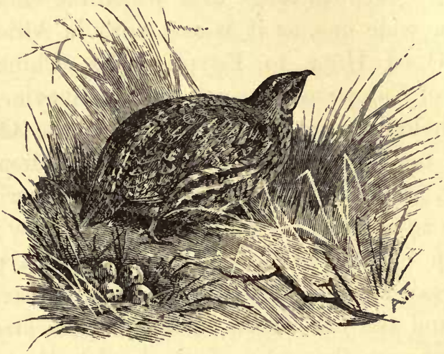
The geographical range over which the Quail is distributed is a wide one, as it is met with in Africa from the Cape of Good Hope to Egypt, India, China, and the countries of Europe as far north as Scandinavia.

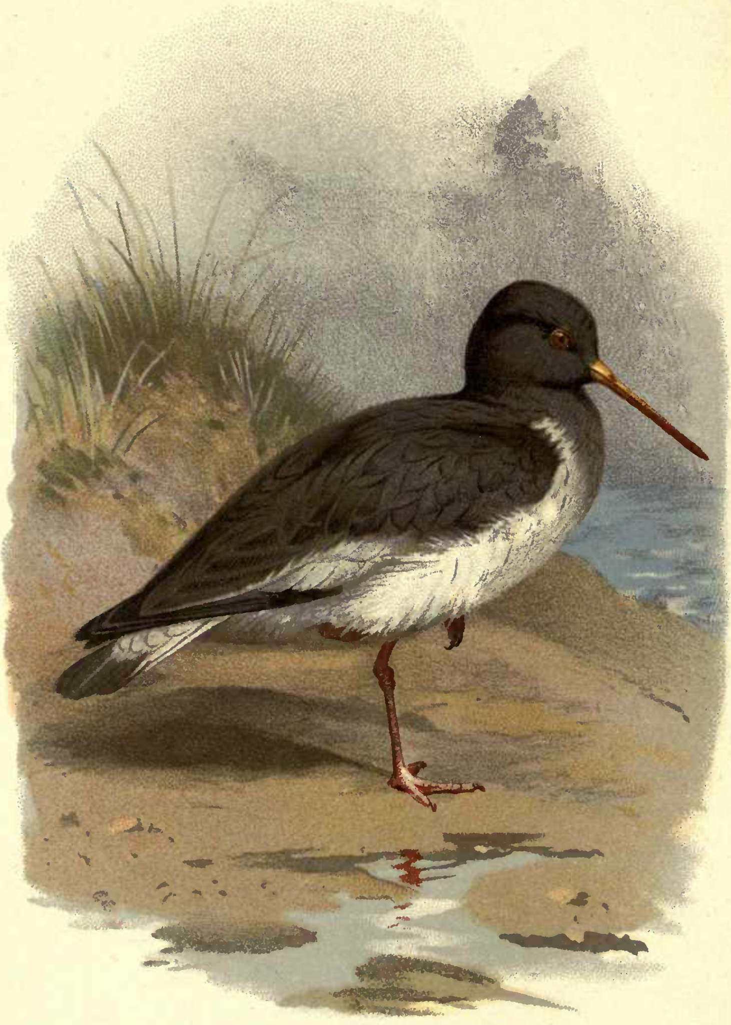
Ornithologists are now agreed that the Quails mentioned in Scripture, as furnishing the children of Israel with food, are identical with the bird here described.

In the adult male the beak is brownish-grey; the irides hazel; top of the head dark brown, with a pale wood-brown streak from the base of the beak on each side over the eye and the ear-coverts, and a narrow streak of the same colour over the crown of the head to the nape of the neck; the plumage of the back, wings, rump, and tail, brown, with lighter-coloured shafts and streaks of wood-brown; wing-primaries dusky-brown, mottled with light brown; chin and throat white, bounded by two half-circular dark-brown bands descending from the ear-coverts, and with a black patch at the bottom in front; breast, pale chestnut-brown, with the shafts of the feathers straw colour; lower part of the breast, belly, vent, and under tail-coverts, yellowish-white; the flanks streaked with pale chestnut; legs, toes, and claws, pale brown.

The female has no marks descending down the sides of the neck, nor the black patch in front, but the feathers on her breast are strongly marked with a small dark spot on each side of the light straw-coloured shaft.

Young birds resemble the female; the black patch on the neck of the males is not assumed until their second moult. The entire length of the full-grown Quail is seven inches.

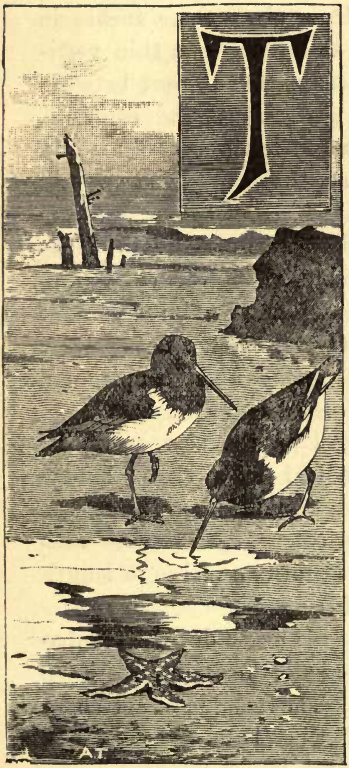




OYSTERCATCHER
(2/7 NATURAL SIZE)

THE OYSTER-CATCHER.

Hæmatopus ostralegus.



THIS handsome and active bird is tolerably common on the shores of Great Britain, and may be generally found where long ridges of shingle banks, and beds of low rocks, promise a plentiful supply of mussels and other shell-fish. The very strongly marked contrasts in the plumage, which are so noticeable in flight, have gained for it the name of Sea-pie, and perhaps it is better known under this title than any other.

The Oyster-catcher is not so entirely devoted to the sea-shore as its names might imply, for it is very frequently seen on the banks of large rivers and lakes, many miles inland; and in some parts of the country it migrates every summer into the interior, and breeds upon the banks of rivers and small islets. At these times the Oyster-catcher feeds upon the worms and grubs to be found in pastures and grass fields; but the ordinary food consists of limpets, mussels and other bivalves, sea-worms, and marine insects.

The bill of this bird is well worthy of notice, as it is admirably adapted for procuring the particular food to which its owner is so partial. It is about three inches in length, greatly compressed, and terminates in a thin vertical wedge; indeed, just the instrument to insert between the two portions of a bivalve and extract the contents. The Oyster-catcher is quite an adept in the use of his bill, and it is said that even the most stubbornly fixed limpets are dislodged with ease and rapidity.

In the winter months these birds congregate in flocks differing considerably in size; but when the spring approaches these flocks are broken up and the birds pair for the breeding season; but the Oyster-catcher is naturally of social habits, and even after pairing many couples will proceed to the same locality and breed together.

Very little trouble is expended on the nest, as in the majority of cases the eggs are laid in a slight hollow scratched in the bare shingly ground. Four eggs are usually laid, of a yellowish stone colour, spotted with ash-grey and dark brown; they are about two inches in length and one inch and a half in breadth.

The male is very attentive to his mate during incubation, and both birds exhibit great anxiety to decoy or frighten away any troublesome intruder. The female sits for about three weeks, and the young birds when hatched are covered with a pretty soft down of a greyish-brown colour.

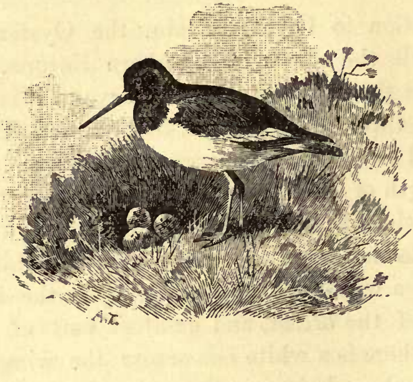
The Oyster-catcher is very easily domesticated. Some years ago a flock was kept in the grounds of the Royal Pavilion, Brighton, where they attracted a great deal of attention. The writer well recollects an Oyster-catcher in the west of England that lived many years in a fowl-yard; it was quite tame, and associated with the fowls and pigeons in the most friendly way. According to Pennant, the Finns hold this bird in the utmost detestation; for they suppose that when they are engaged in seal-chasing it gives timely notice to the seals of the approach of the hunters, and by that means frightens away their game. The peasants in the north-eastern parts of Scotland, however, regard it very differently, and consider its early appearance inland as a sure sign of a mild and productive season.

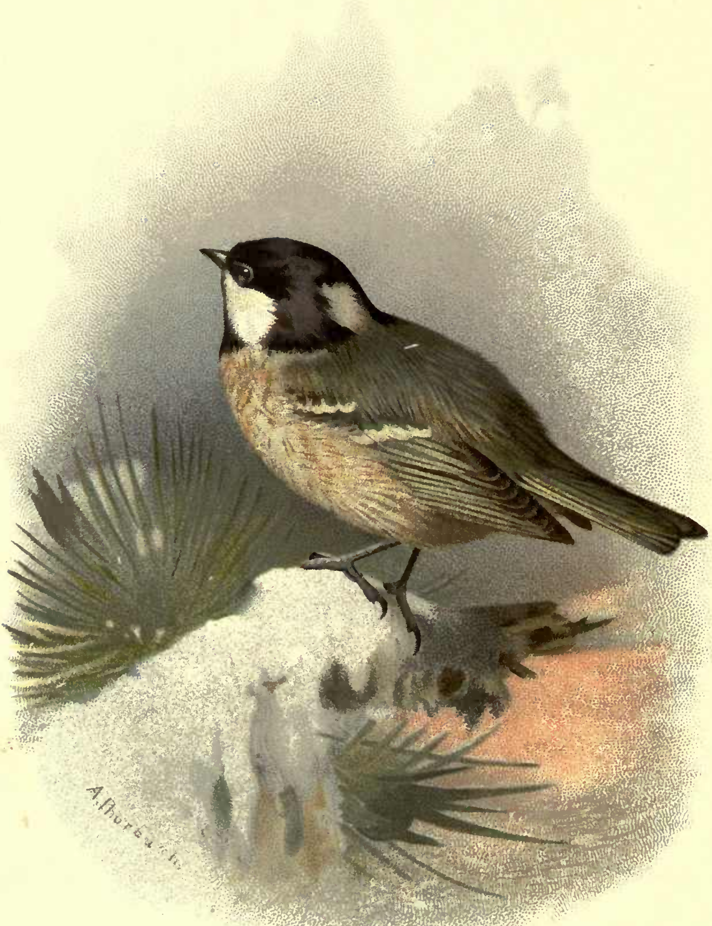
In addition to Great Britain, the Oyster-catcher is found on all the coasts of Southern Europe, Denmark, Sweden, and the Scandinavian shores; and it is said to be well-known throughout Russia, Siberia, and Kamschatka, and to breed on most of the large Arctic flats.

The length of the Oyster-catcher is about sixteen inches; the beak at the base is deep orange, growing lighter towards the tip; the irides crimson; the eyelids reddish-orange, and there is a white spot below the eye; the head, neck, upper part of the breast, and greatest part of the wings are black; there is a white bar across the wings, and the tail is white about half-way from the rump, the end half being black. All the under portions of the body and wings are white. The legs and toes (the latter being three in number and all directed forward) are of a purplish flesh colour; the claws black. In the winter months the birds have a gorget of white round the front of the neck, and in some instances this mark is retained over a great portion of the spring.

The Oyster-catcher is a rather shy bird, not easy to be approached closely except during the breeding season, when it becomes bolder and apparently less cautious. When alarmed it utters a peculiar shrill whistling cry, which also may be often heard at night as the birds are going to or returning from their feeding grounds.

Occasional instances have been noted of this bird having been met with almost entirely white, and others of a pale-fawn colour.

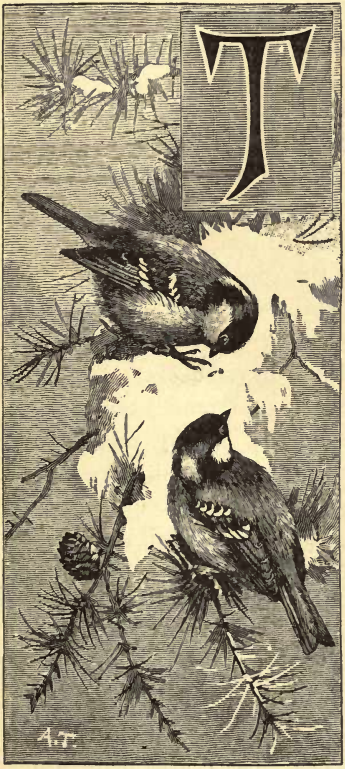




COLE TIT
(4/5 NATURAL SIZE)

THE COLE TIT.

Parus ater.



THIS pretty and active little bird is very well known in almost every county in Great Britain. It is certainly not so numerous as the Blue Tit, but its geographical distribution is quite as wide and impartial. The places of resort most favoured by these birds are woods, plantations, and shrubberies, especially those containing any sorts of fir trees, birch, or oak; not unfrequently they may be observed in little parties in furze-brakes and tangled thickets near streams.

The general habits of the Cole Tit are very similar to those of the Blue Tit; it is incessantly in motion, actively searching for its food among the branches of the trees above mentioned. It is very careful and persistent in its scrutiny of the bough upon which it is engaged, running nimbly round the under surface and the sides; and then, when its curiosity is satisfied, proceeding with a short fluttering flight to the next.

The Cole Tit is a very sociable little bird, and may frequently be seen in the company of Golden Crests, Lesser Red-polls, and similar small tree-frequenting birds, roving about in quest of food. This consists principally of insects, caterpillars, and beech masts, and seeds of various kinds. Mr. Tegetmeier gives an instance in the *Field* of its feeding on filberts.

This bird remains with us all the year round, and seems to be very little affected by cold weather, as it is found in mid-winter in the most northerly parts of Scotland, and even in higher latitudes.

The flight is seldom a very extended one. The motion of the wings may be described as "a continual fluttering" and the movement altogether weak, short, and unsteady. In the winter-time these birds are fond of roosting in leafy evergreens and the protected sides of haystacks.

The bird makes no pretensions to vocal proficiency; the note is not very harmonious—indeed, it may rather be called harsh and shrill—it sounds very much like the syllables "che-chee, che-chee." When a number of these birds are engaged in searching for food the shrill cheeping note is perpetually uttered. In addition to this note, the bird, when sitting in its nest, makes an unpleasant hissing noise suggestive of snakes if molested or too closely approached.

The nest is very frequently placed in a hole in a tree, and as a rule at a less height from the ground than that of the other Titmice; but various places are made use of for nesting purposes, such as a hole in a wall or bank, the hollows about the exposed roots of trees, or even the deserted hole of a mouse or rat. Sometimes a small hole will be enlarged by the birds themselves.

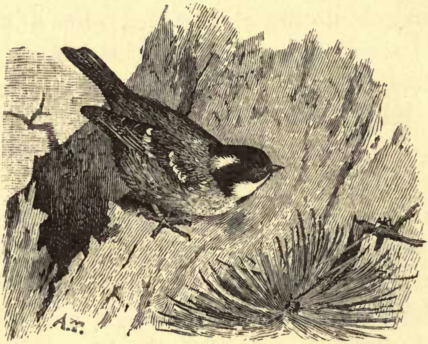
The nest is made up of a mass of fine moss, dry grass, hair, and wool; it is always lined very thickly with feathers. Six or eight eggs are laid; they resemble the eggs of the rest of the Titmice—white spotted with red. The male bird is said to often take his turn at sitting, and incubation lasts about fourteen days.

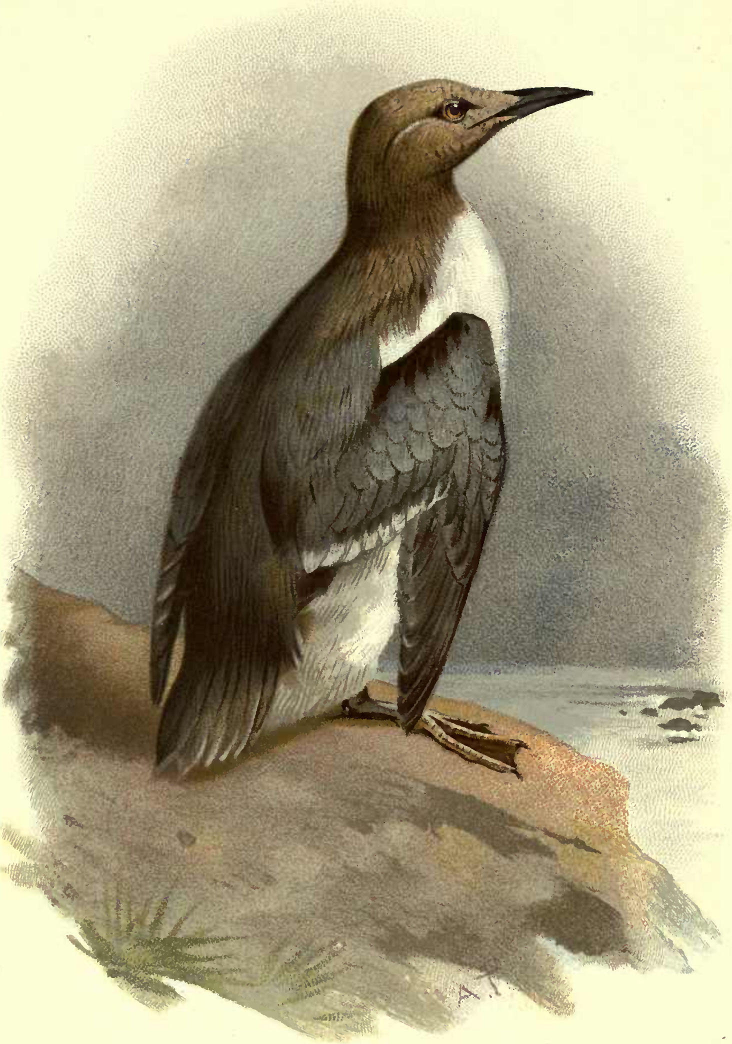
The young birds are at first fed almost entirely on caterpillars; where these birds are plentiful large numbers of caterpillars must be destroyed at these times, as the parents are most assiduous in their attention to their offspring, and may be observed going to and from the nest almost continually.

The adult male has the beak black; the irides hazel; the cheeks and sides of the neck, white; the head, ear-coverts, and the lower part of the sides of the neck before the wing, black; back and wing-coverts bluish-grey, the smaller and larger coverts ending with a spot of white on each feather, forming two conspicuous white bars across the wings; the quill feathers brownish-grey, edged with green; the tertials tipped with dull white; upper tail-coverts greenish fawn colour; tail feathers brownish-grey; tail slightly forked. The chin and throat black; breast dull white; belly, flanks, and under tail-coverts fawn colour, tinged with green; under surface of wing and tail feathers, grey; legs, toes, and claws black. The entire length of the bird is about four inches and a quarter. The Cole Tit may at once be distinguished from the Marsh Tit by the white patch on the nape.

There is very little difference in the plumage of the sexes, but in the young birds the white markings are not so pure, and the black colour about the head is less decided.

The Cole Tit has been met with in Norway, and is said to be a resident in Sweden and Siberia. It is tolerably well distributed over many of the European countries.



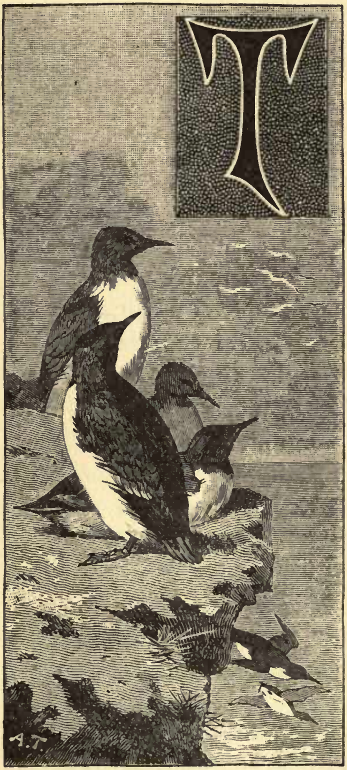


GUILLEMOT

(2/7 NATURAL SIZE)

THE GUILLEMOT.

Uria troile.



THIS somewhat odd-looking bird is perhaps better known as the "Foolish Guillemot," and is also, in some places, called the Willock, or Tinkershere. It is one of the commonest of the species, and is met with in the tideway of the open sea at all times of the year, and all round the coasts of Great Britain. During the breeding season these birds assemble in very large numbers on the rocky islands and wild cliffs which are to be found on various portions of our shores, and at these places they breed in the company of Razorbills, Puffins, Gulls, and other sea-going birds. It is worthy of remark that, although the above-mentioned birds make use of the same spot as a breeding-place at one and the same time, yet no confusion or misunderstandings arise between the occupants. The Guillemots keep a ledge of the rock entirely to themselves; the Razorbills and Gulls do likewise; and we have it on undoubted authority that the various families keep strictly to their own precincts, and do not attempt any intrusion on the domains of their neighbours. This is the more remarkable, as upon some of the larger breeding stations the various birds may be reckoned by many thousands.

The Guillemot lays only one egg; it is large considering the size of the bird, and shaped somewhat like a pear; the colour is a fine bluish-green, more or less blotched and streaked with dark reddish-brown or black; the length is about three inches and a quarter, and nearly two inches in width. The eggs of this bird differ very considerably in colour, some being almost of a white ground, and others with scarcely any secondary markings on them. The Guillemot deposits her egg upon the bare rock, making no attempt to form a nest; incubation lasts nearly a month, during which time the parent bird sits perfectly upright, and certainly presents a very comical appearance. The eggs are considerably prized as articles of food, and the dangerous process of collecting them is on many parts of the coast a regular occupation.

The young Guillemots are at first covered with a sort of bristly hair which appears to be quite impervious to the water. Until the young birds are taken to the water they are fed with portions of fish. It has often puzzled naturalists to account for the *modus operandi* adopted by the old birds in transporting their progeny to the sea. Mr. Waterton, in his account of a visit to the rock-bird breeding localities about Flamborough Head says, " I carried a good telescope with me; through it I saw numbers of young Guillemots diving and sporting on the sea, quite unable to fly; and I observed others on the ledges of the rocks as I went down among them, in such situations that, had they attempted to fall into the waves beneath, they would have been killed by striking against the projecting points of the intervening sharp and rugged rocks; wherefore I concluded that the information of the rock-climbers was correct, viz., that the young birds were carried to the sea on the backs of the old ones."

The Guillemot is essentially a quiet bird, and seldom gives vent to any utterance save an occasional guttural croak. It will even allow its egg to be stolen without making any vocal sign of displeasure or remonstrance.

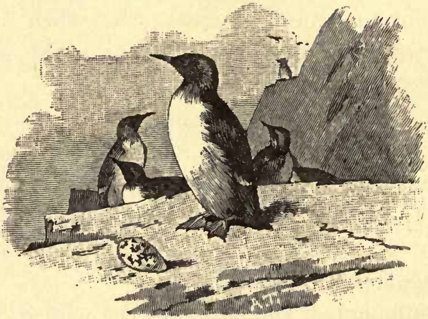
These birds with their young forsake their breeding stations about the end of August; they then take to the open sea, remaining there both day and night, and in some cases at great distances from the land.

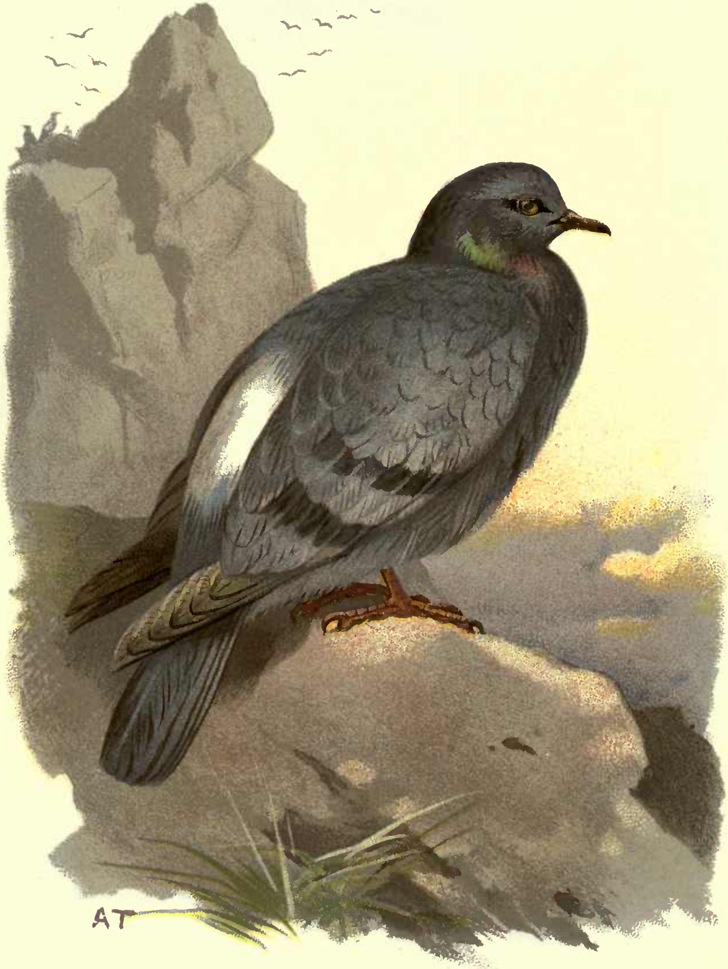
The Guillemot bears a strong general resemblance to the Divers, both in appearance and habits. The food consists of small fishes of various kinds, and also small crustacea. It swims and dives with ease, but is seen to very little advantage on dry land, where its movements are awkward and apparently uncertain.

When submerged, the bird uses the wings as a propelling power, and the rapidity of its motion, coupled with its easy and graceful evolutions, are matters of astonishment to all who have had an opportunity of observing them.

In the summer months the bill, which is of moderate length, strong and pointed, is black; the inside of the mouth orange; the irides very dark brown; head, neck all round at the upper part, and on the sides and hind part below, the back, tail, and wings, except the secondaries, sooty black; lower part of neck in front, and all the under surface of the body pure white; legs, toes, and their membranes, dark brownish-black; the whole length of the male bird is about eighteen inches. The females are a trifle smaller than the males.

In addition to our own seas, the common Guillemot is found in summer in various parts of Scandinavia, the Faroe Islands, and as far in the Arctic seas as Nova Zembla and Spitzbergen. It is also met with on the coasts of Holland and France, and very occasionally in the Mediterranean Sea.

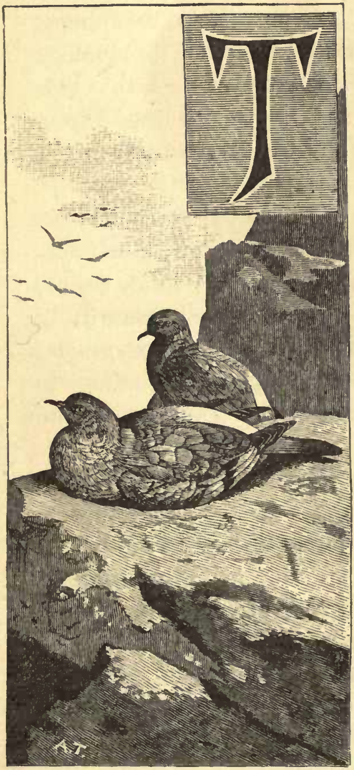




ROCK DOVE
(2/5 NATURAL SIZE)

THE ROCK DOVE.

Columba livia.



THE Rock Dove derives its name from the character of the localities in which it principally abounds, and which are almost invariably of a rocky nature. The cliffs of the Scottish coast, and the Yorkshire cliffs of Flamborough and Speeton, may be mentioned as places where these birds may be found in great abundance, but, indeed, almost everywhere that the coast offers a secure home and shelter the Rock Dove may be said to be at home in greater or less numbers.

Denmark, Norway, Sweden, the islands of the Mediterranean, North Africa and Teneriffe are spoken of as the homes of these birds, and in Great Britain the eastern and western coasts of the more northerly counties afford convenient retreats for one of the most widely distributed of the pigeon family.

The Rock Dove is undoubtedly the founder of the almost numberless varieties of tame pigeons with which our poultry-yards abound. In speaking of this fact, Morris observes, "If you look at each and every one of the pigeons that fly about the barn and fold-yard, or rise in a flock from the open field, or are hung up in the poulterer's shop in the narrowest streets of London, you will see that almost every individual bird, let the varied colours of its plumage be what they may, has a patch of white over the tail. This will at once show you that it must derive its origin from the species at present before us, and not, as naturally might be supposed, from the common wild pigeon of the woods."

The length of the Rock Dove is about thirteen inches; bill dullish-brown slightly tinged with yellow, much flattened about the middle. Iris, pale orange; head, crown, and back of neck, bluish-grey; sides of neck beautifully glossed with sheeny reflections of purply-red and green; chin, bluish-grey; throat, purple and green according to the light; breast and back, light bluish-grey, and white on the rump.

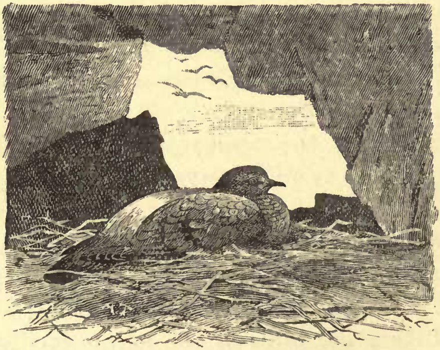
The wings measure twenty-five or twenty-six inches when expanded; they are of a dull bluish-grey, with two conspicuous bands of black; under wing-coverts are white. The tail is bluish-grey, tipped at the end with a band of black about an inch in depth. The legs and toes are red and scaled on the front and upper parts; claws, a brownish-black. The female is less bright in colour than the male, and the bands on wings and tail are browner, but the sexes are not easily distinguished. The feathers are very loosely set, and are easily pulled out.

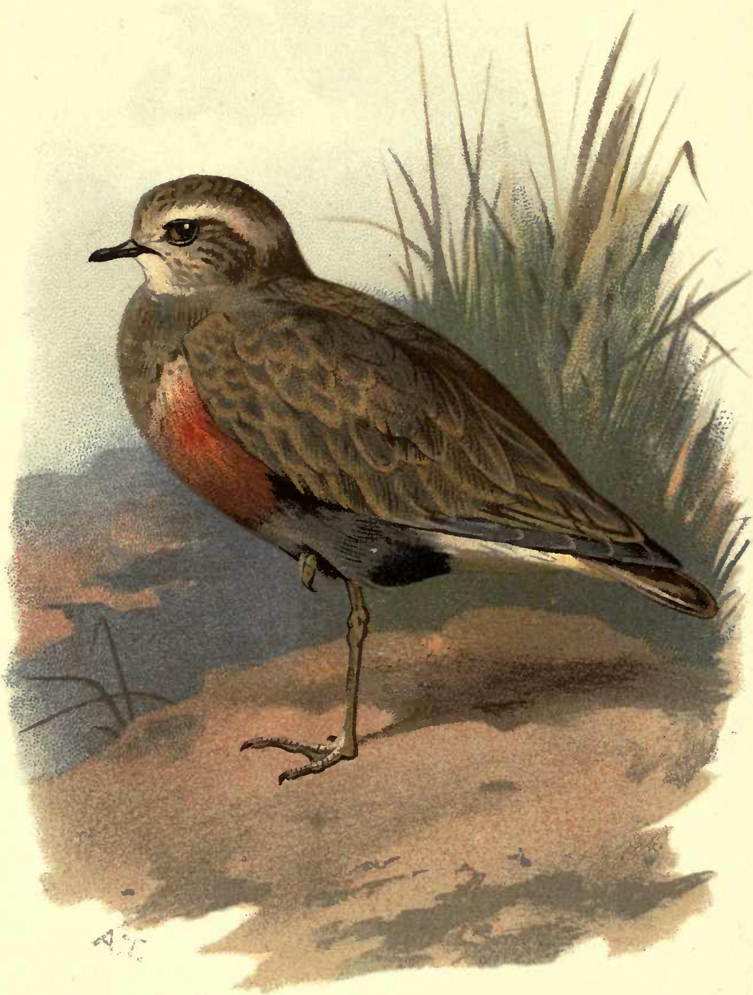
In the matter of food the Rock Dove is almost a vegetarian, its diet consisting mostly of peas, oats, barley, wheat, and various other grains and seeds. It, however, exhibits a marked partiality for the most valuable crops, and the depredation committed in some localities by these birds is very serious, as they feed rapidly and continuously, and travel considerable distances in search of their favourite food. As may be imagined, the farmers and market-gardeners patronised by them regard them with great animosity, and destroy them whenever and wherever an opportunity offers. Some idea of the amount of grain consumed by them may be formed from the fact that two specimens examined by Mr. Macgillivray contained, the one over a thousand grains, and the other, five hundred and ten.

The flight is strong and rapid, and a loud cracking noise is produced by the wings. When on the ground they walk with an easy movement, nodding the head to and fro as they proceed. They feed in flocks varying in number, and when alarmed the whole party rises simultaneously with the loud flapping noise already spoken of. In leaving their homes for a foraging expedition, and in returning at evening, the flight is straightforward, and just high enough to clear any intervening obstacles.

In the winter and spring these birds assemble in prodigious flocks, and are then bolder and more easy of approach than during the summer. They roost in the holes and caves of rocks, and occasionally in old buildings or towers. Like other birds of the pigeon family, the Rock Dove is fond of water, and takes great delight in bathing, also in dusting itself. The note is a "Coo-roo-coo," the last syllable being prolonged. The nests are commonly found in companies or colonies, in some cavern or similar retreat, where they live upon amicable terms one with another. Dry sticks and twigs with bents of hay or stalks are roughly laid together, and two eggs laid thereon; they are smooth and white. The male is very assiduous to his mate during sitting-time, and remains close to the nest at night. When first hatched the young birds are covered with a soft yellow down. The Rock Dove seldom perches upon trees, but rests at times on some elevated and isolated spot whence a clear survey can be obtained of the immediate neighbourhood. It is generally considered that these birds pair for life; at any rate, they are extremely attached to their partners, and their grief and distress when separated is so marked as to have become proverbial.

If taken when young they soon become tame and familiar, and attain a considerable age.



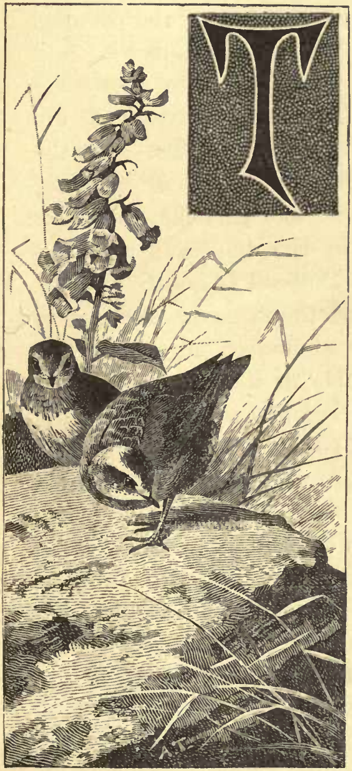


DOTTEREL

(½ NATURAL SIZE)

THE DOTTEREL.

Charadrius morinellus.



THE Dotterel, or as it is frequently called, the Dotterel Plover, although by no means a rare bird, is not so thoroughly distributed over Great Britain as a great many others. In Dorsetshire and Devonshire its visits are of extreme rarity, whilst in Cornwall only one or two instances are recorded of its being met with. The Dotterel is a native of Europe, being found in nearly all the countries of this continent, and it is also said to be met with in Northern Asia, Persia, and Tartary. With us the Dotterel is a summer visitor only, arriving about April on our south-eastern coasts, whence it passes onwards to the high grounds of Lincolnshire, Derbyshire, Yorkshire, Lancashire, Westmoreland, Northumberland, and various parts of Scotland. The Southdowns of Sussex are also favourite resorts of the Dotterel, and upon certain hills lying between Lewes and Brighton flocks of these birds may be met with every year with almost unfailing regularity. As feeding-places it loves the high grounds, downs, and moors, and is most commonly met with on the fallow land and newly-ploughed fields that fringe the higher parts of the downs and elevated portions of the country. The food consists of worms, grubs, slugs, and insects.

When the birds arrive at the more northerly localities above mentioned they usually frequent the fallows and heaths for about a week, and then seek the moss-covered mountains, which they select as breeding places; and they seem to favour those particular localities which are frequently obscured by the drenching rain and mists. During incubation the Dotterel is generally to be found in company with others of the same species, several pairs appearing to live together in perfect harmony. The nest is nothing more than a hole in the ground covered with vegetation, and generally near some stone or rock. Three eggs are commonly laid; they are of a yellowish-olive colour, with spots and markings of dark brownish-black, and about an inch and three-quarters in length.

During the breeding season the Dotterel is much more wary and timid than at any other time, its ordinary characteristic being what may be called downright stupidity. So indifferent are these birds to danger, that when one of their number has been shot the remainder of the flock will fly only a little distance, and soon return to their original feeding-place, even though the sportsman, gun in hand, is waiting to further reduce their numbers. An entire flock has been secured in this way with little or no trouble.

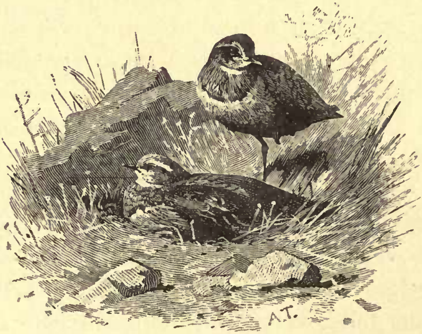
The Dotterel runs and flies easily and with a quick active movement, and is fond of dusting itself. The note is soft and low, and has been compared to that of the common linnet, while some naturalists have likened the sounds to the words "durr," "droo." The bird belongs to the Grallatorial family, and is much esteemed as an article of delicate eating. Large numbers of them used also to be killed in the Lake districts for the sake of their wing feathers, which are highly esteemed among anglers as artificial fly-dressing.

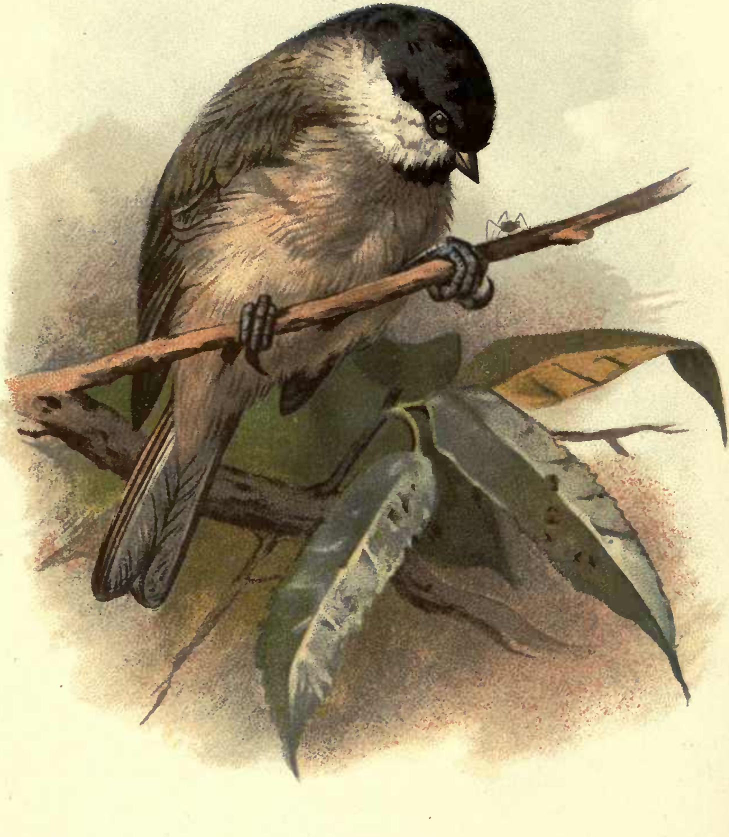
Before leaving this country Dotterels congregate in large flocks, and remain thus together until their actual departure, which usually occurs about September; some, however, have been known to remain until October.

The beak of the Dotterel is short, nearly black; the top of the head and nape of the neck dark brown, bounded on the sides and behind by a band of white; ear-coverts, neck and back, ash colour; scapulars, wing-coverts, and tertials, ash-brown edged with buff; wing primaries ash-grey, the first with a broad white shaft; tail greyish-brown, the middle feathers tipped with dull white, and the outside feathers with broad ends of pure white, front and sides of neck ash-grey; across the breast is a band of white, margined above and below with a dark line; breast is a rich fawn colour, blending into chestnut; belly, black; vent and under tail-coverts white tinged with buff; underneath the wings are greyish-white; the legs and toes are greenish-yellow, and the claws black. The bird measures about nine and a half inches, and usually weighs about four or five ounces. In the female the plumage is not so handsome, the markings being paler and not so distinct, and the feathers on the breast are brown.

In relation to the confiding nature of this bird, it may be remarked that its name *morinellus* literally means "a little fool," about as uncomplimentary a title, perhaps, as any bestowed upon any member of the feathered tribes. An old idea concerning the bird was that it imitated the movements of the sportsman or fowler, and Mr. Yarrell, in his description of the Dotterel, quotes a passage from Drayton to this effect:—

> "The Dotterel, which we think a very dainty dish,
> Whose taking makes such sport, as no man more can wish,
> For as you creep, or cower, or lie, or stoop, or go,
> So marking you with care, the apish bird doth do;
> And acting everything, doth never mark the net,
> Till he be in the snare which men for him have set."



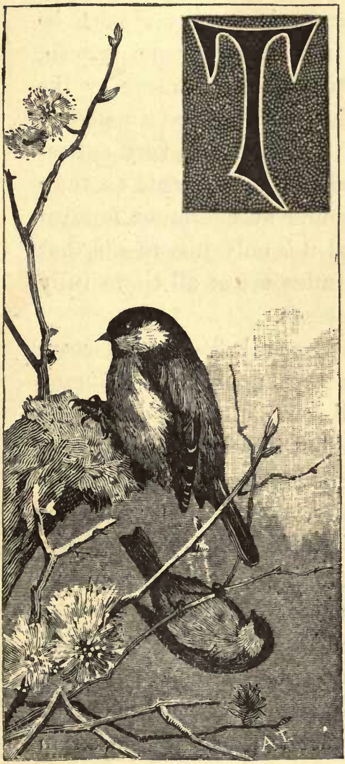


MARSH TIT

(3/4 NATURAL SIZE)

THE MARSH TIT.

Parus palustris.
Parus atricapillus.



THIS pretty and sprightly little bird is to be found in Great Britain all through the year. It can scarcely be called a common variety, although it is tolerably well distributed over most parts of the country, without being very numerous in any particular locality. It occurs with less frequency in Ireland and the north of Scotland than in any other portions of the kingdom. In different districts the Marsh Tit has had various titles bestowed on it, amongst which may be mentioned Smaller Oxeye, Willow Biter, Joe Bent, and Black Cap.

Although generally known as the Marsh Tit, the bird is by no means an inhabitant of wet or marshy places;

true it is that it is frequently seen by the woody margins of streams or ponds, but it may also be noticed busily at work searching for food in almost any situation where brushwood, copses, and low trees abound.

The habits of the Marsh Tit correspond with those of all the Titmice; sprightly in movement, unceasing and unwearying in searching for food, this little bird seems to make the extermination of the various forms of insect life the great object of its existence; and it may almost be taken for granted that wherever and whenever one is seen, it is on the hunt, either to satisfy its own wants or the requirements of its young family. During the time when the young birds are in the nest this activity is very noticeable and amusing, the visits paid by the parents to their progeny being perpetual. Of course an enormous number of insects are thus destroyed, and it is only just to add that the appetites of the young Titmice are at all times fully equal to the exertions of their parents.

In winter these birds collect in small flocks and roam about from place to place as the supply of food may diminish. In autumn also small companies of these little birds are frequently observed; but rarely exceed six or eight in number, and are probably composed of the members of the same family. Sometimes, however, it associates with small birds of other species. The flight is unsteady and undulating, but is rather rapid, though seldom indulged in for any but short distances.

The note may be said to resemble the syllables "chee-chee" uttered quickly and several times in succession; it has a lively sound, but is shrill and not very melodious.

The nest of the Marsh Titmouse is generally placed in holes of old and decayed willow trees, and in the stumps of pollards, and usually the entrance is too small to allow of the nest being easily withdrawn. Colonel Montagu says he "has seen this bird excavating the decayed parts of such trees, and artfully carrying the chips in its bill to some distance, always working downwards, and making the bottom for the reception of the nest larger than the entrance." Instances are recorded of the nest having been placed in a rabbit-burrow or deserted rat's hole. It is well built and strongly compacted of wool, moss, or fine dried grass, and lined with the soft seed-down of the willow.

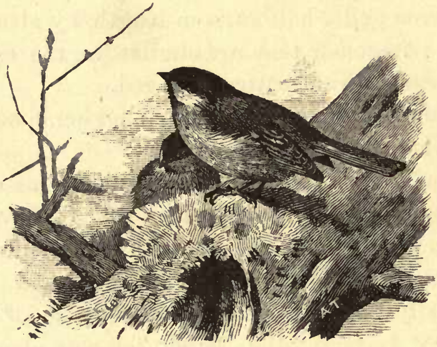
The eggs vary in number from five to eight; they measure seven and a half lines in length by about six lines in breadth; in colour they are similar to the eggs of the other Titmice—white spotted with red.

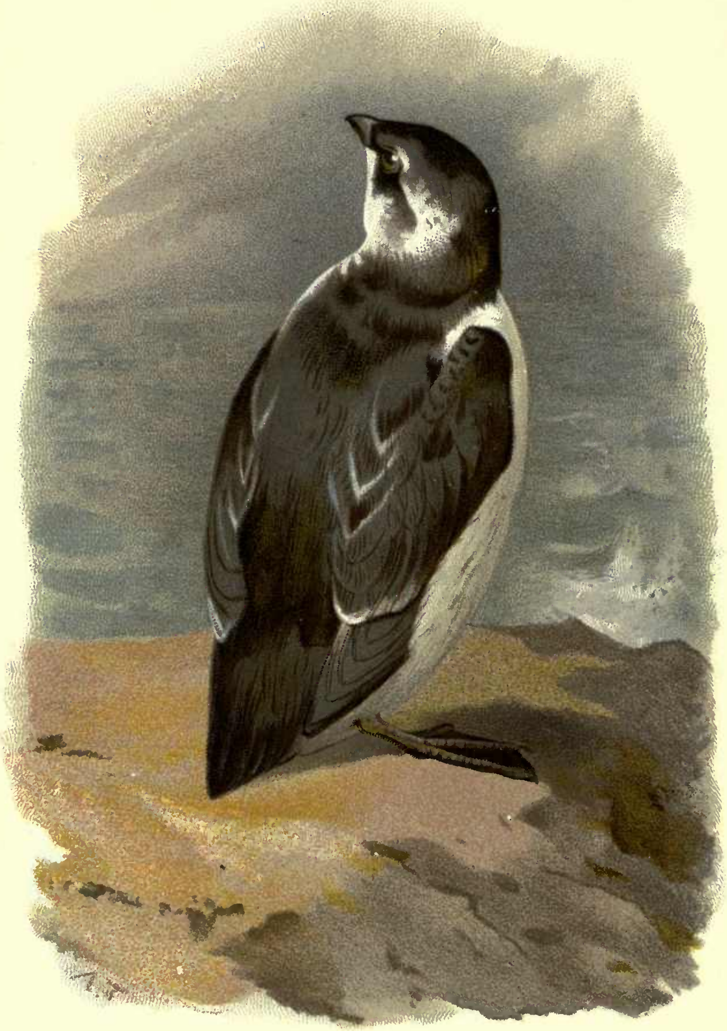
The female shows great fondness for her home, and only leaves it with considerable reluctance.

The food of the Marsh Tit consists of insects in their various stages of development; it is said to have a reprehensible weakness for bees, and also feeds on different kinds of seeds, particularly those of the sunflower and the thistle; it occasionally visits gardens for the purpose of obtaining the former. In fact, "the Marsh Tit may almost be said to be omnivorous: nothing comes amiss to it. In winter one may easily obtain an opportunity of watching its habits in frosty weather by hanging up a bone, or a lump of suet, or even a tallow candle, in the garden."

The Marsh Tit may be distinguished from the Cole Tit by the absence of the white patch on the nape of the neck, nor has it any white spots on the wing-coverts.

The beak is black; the irides dark hazel; the forehead, crown, and nape deep black; the back, wing-coverts, and upper tail-coverts ash-brown tinged with green; wing and tail feathers greyish-brown, with the edges rather lighter in colour; the tail even at the end; the chin black; the cheeks, throat, and breast dull greyish-white; flanks, belly, and under tail-coverts tinged with light brown; under-surface of wing and tail feathers grey; legs, toes, and claws bluish-black. The length of the bird is about four inches and a half. There is no perceptible difference in the plumage of the sexes.





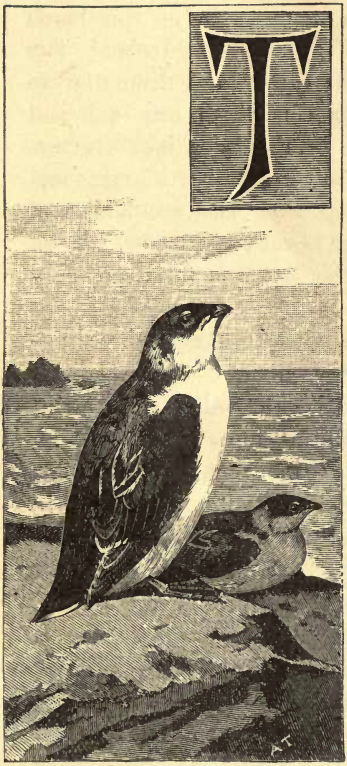
LITTLE AUK

(1/2 NATURAL SIZE)

THE LITTLE AUK.

Alca alle.

Mergulus melanoleucos.



THE Little Auk, or, as it is more familiarly called, the Common Rotche, is a winter visitor only, and is seldom seen farther south than the islands of Orkney and Shetland. Occasionally, during very severe and protracted gales, these birds are compelled to forsake the open sea and take refuge on those parts of the coast where shelter and protection may be found. At these times they are shot with little difficulty. Numerous instances are recorded of the Little Auk being found on various parts of our coasts, and sometimes in large numbers; but as soon as the severity of the weather had abated the birds invariably disappeared; they have also been picked up, dead or exhausted, in localities far distant from the sea, where they had been driven by the violence of the winds.

The Little Auk is of truly oceanic habits; in its food and general methods of life it closely resembles the Guillemots, passing its time (except at the breeding seasons) upon the sea, searching for its food, which is supposed to consist almost entirely of the smaller crustacea.

This bird breeds in the most northern of the Faroe Islands, and, according to some naturalists, in Iceland. The eggs are of a uniform pale blue colour, not dissimilar to those of the starling; the length is about one inch and seven lines, and the breadth one inch and one line. Naturalists are divided in opinion as to the number of eggs laid by the Little Auk, some saying that two are laid, and others affirming that the number never exceeds one. From the most recent observations the latter is most probably correct.

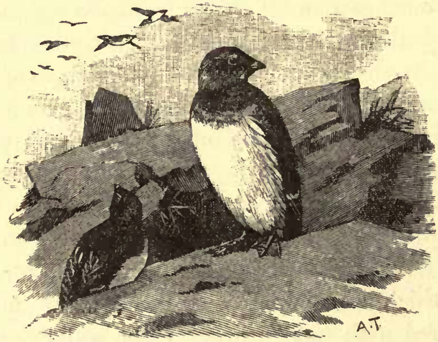
Dr. Hayes thus describes his visit to a great breeding-place of the Little Auk on the Greenland coast of Smith's Sound. The slopes on both sides of the valley were about a mile wide, and consisted of piles of loose rocks. Along these slopes the Little Auks flew in a constant stream a few feet above the stones, occasionally alighting in thousands on the rocks, under which their eggs were deposited, and in the winding narrow passages. The Esquimaux in this valley eat great numbers of these birds, which they catch in a very ingenious manner. Armed with a net attached to a long pole they conceal themselves among the rocks, and often catch half-a-dozen birds at a time by suddenly raising the net at the moment the flock is passing over their heads. Dr. Hayes saw more than a hundred birds caught in this manner in a very short time.

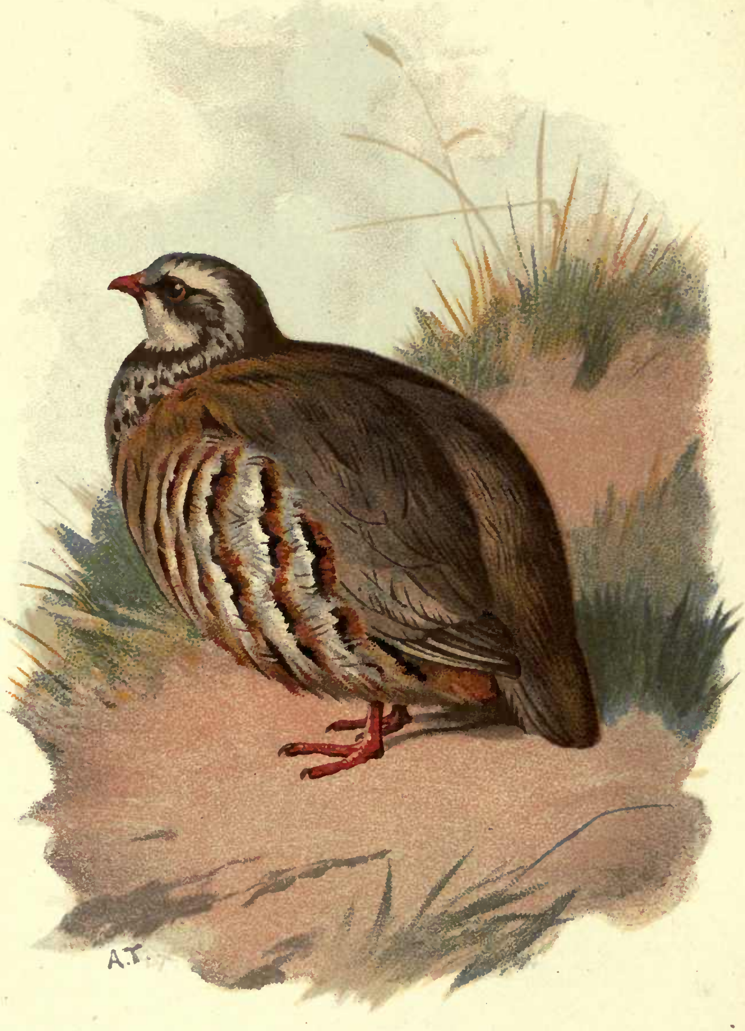
In his "Memoir on the Birds of Greenland" Colonel Sabine has some interesting observations about this bird; he says, "This species was abundant in Baffin's Bay and Davis Straits; and in latitude 76° was so numerous in the channels of water separating fields of ice that many hundreds were killed daily, and the ship's company supplied with them. The whole of the birds in the breeding season, the sexes being alike, had the under part of the neck a uniform sooty-black, terminating abruptly and in an even line against the white of the belly; the young birds, which we saw in all stages from the egg, as soon as they were feathered, were marked exactly as the mature birds: but in the third week in September, when we were on our passage down the American coast, every specimen, whether old or young, was observed to be in change; and in the course of a few days the entire feathers of the throat and cheeks and of the under part of the neck had become white."

In the adult bird the beak is black; shorter than the head, and thick and broad at the base; the nostrils are partly covered with small feathers; the irides hazel, with a small white spot over the eye; the head, hind part of neck, back, wings, and tail black, but the ends of the secondaries and the sides of the tertials are margined with white; the colour of the chin, throat, and neck in front depend on the season, being black in summer and white in winter, but mottled with black and white in the spring and autumn; the under surface of the body white; legs and toes yellowish-brown, the membranes between the toes darker brown. The wings and tail are short, and the legs have a very backward position. The Little Auk is a very small bird, being scarcely half the weight of the Puffin. There is no difference in the appearance of the sexes.

The young birds of the year, according to Temminck, may be distinguished by having the cheeks shaded with grey. When in down they are uniform sooty brownish black. The entire length is about eight inches and a half.

The Little Auk is found as far north as Nova Zembla, Spitzbergen, and Greenland.

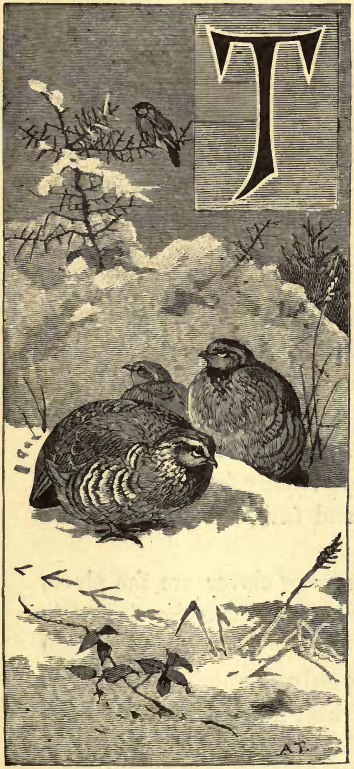




RED-LEGGED-PARTRIDGE
(⅓ NATURAL SIZE)

THE RED-LEGGED PARTRIDGE.

Perdix rufa. *Perdix rubra.*
Tetrao rufus.



THIS bird, which is also called the Guernsey Partridge, and French Partridge, although possessing many characteristics in common with the English bird, is, however, quite distinct from it; and in nearly all localities where the former has gained a footing the latter has gradually become scarcer. The Red-legged Partridge cannot strictly be described as a British bird, though it is comparatively common in many parts of Great Britain; and from the large numbers exposed for sale in our markets and game-shops, it is now thoroughly familiar to most people.

The Red-legged Partridge is said to have been first brought into this country in the reign of the second Charles, and since then it has been successfully introduced by several noblemen on their estates.

This bird is now found more or less in all parts of England, but it is most plentiful in the counties of Suffolk, Lincolnshire, Cambridgeshire, Hertfordshire, Dorsetshire, Norfolk, Essex, Yorkshire, and Oxfordshire. It is a native of several of the countries in the south of Europe, and it is also found in the Channel Islands. As an article of food it is not so highly esteemed as its English relative, the flesh being whiter and less succulent; while as an object of sport it certainly does not meet with much appreciation, as it is wild in its habits, and cannot easily be induced to fly, but runs a very considerable distance. When wounded it frequently secretes itself in some hole, rabbit-burrow, or any similar place of concealment.

The favourite haunts of these birds are heaths, commons, waste lands, and the bushes and copses of hilly grounds; they are also to be found, like the common partridge, in stubbles, turnip-fields, and cultivated lands; they run with great quickness, and sometimes indulge in very long flights; indeed, they are occasionally found on the sea-shore, so completely exhausted and fatigued as to be quite unable to escape capture.

Cornfields and patches of grass or clover are the places commonly selected by the Red-legged Partridge for nesting. The nest is composed of dried grass and leaves, and sometimes a few feathers roughly scratched together. According to some writers, the nest has been found in the thatch of a hayrick. The eggs are of a reddish, yellowish-white, spotted and speckled with brownish-red, and vary in number from ten to sixteen or eighteen; they are about one inch and a half long, and an inch and a quarter broad. The entire duties of incubation and rearing the young devolve upon the female. Like all the other members of this class, the young ones quit the nest immediately they are hatched, their capabilities for running and feeding being developed at a very early stage of their existence.

They feed on grain, clover, and other seeds, flies, beetles, caterpillars, ants and their eggs, grubs, and small snails, and are much addicted to scratching in the dry earth for food.

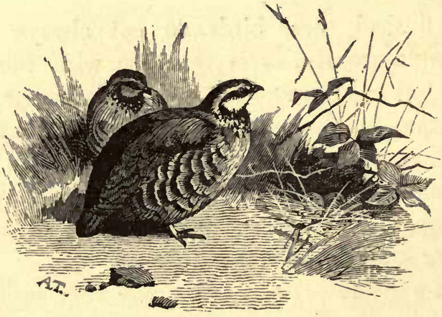
When flushed these birds do not always leave the ground simultaneously, as is the case with the common partridge; but one or more will perch on some gate, post, or stone that may be close at hand, and are not unfrequently shot whilst perching in this way. Or they will scatter in all directions, each one running for the nearest hedge with incredible speed. The flight is strong, rapid, and often sustained for some considerable distance.

Even at a distance these birds may very easily be distinguished from the Common Partridge, as they are larger, darker, and the whirring sound made by the wings in flight is altogether different.

The note is said to closely resemble the word "cokileke," and is most frequently heard in the spring.

The plumage of the Red-legged Partridge is handsome. The beak is red, a black streak passes from the nostrils to the eye, and thence downwards and forwards, making a gorget of black, from which streaks and spots of black descend towards the breast; irides are reddish-orange; eyelids vermilion. Back of neck, back, rump, wing and tail coverts are brownish, the plumage being smooth and blended; tail-feathers chestnut; breast pearl-grey; belly, vent, and under tail-coverts fawn colour; sides, flanks, and thighs are barred with white, black, pearl-grey, and fawn colour; legs and toes red; claws brown. The male has on the leg a rounded knob in the place of a spur.

The female resembles the male, except that her plumage is not so bright, and the markings are not so well defined. She is also devoid of the knob-like spur on the leg.



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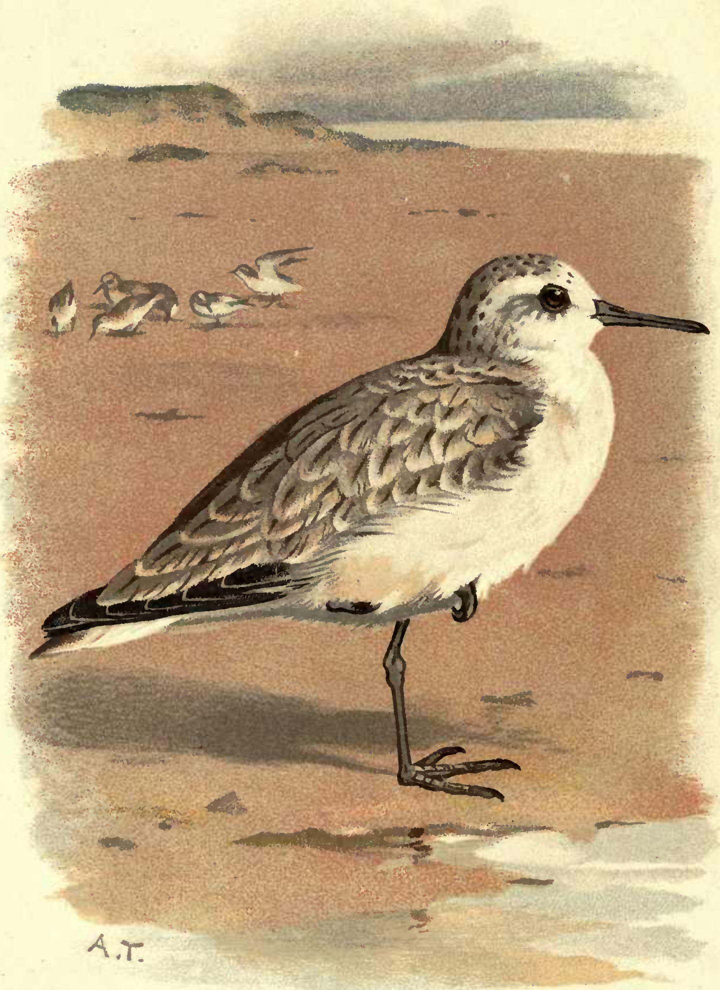
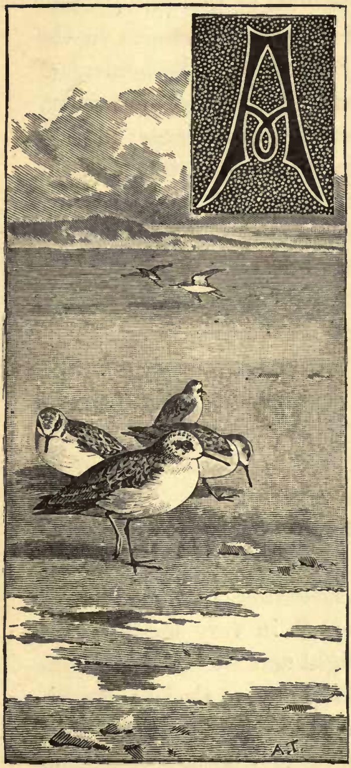


SANDERLING
(3/5 NATURAL SIZE)

THE SANDERLING.

Charadrius callidris.
Callidris arenaria.



ALTHOUGH by no means a common bird, the Sanderling is tolerably well distributed over the coasts of Great Britain and Ireland; and in spring, summer, and autumn may be found upon most of our low sandy shores and tidal rivers.

It is an active sprightly bird, searching for its food either in small parties, or associated with Dunlins, Dotterels, or other birds of similar habits. But the seashore and banks of tidal rivers are not the only resorts of the Sanderling, as in the summer months it may frequently be seen many miles from the coast, on the sides of muddy ditches, or more commonly running along the edges of ponds, lakes, and any large inland sheets of water, as with other members of the family.

In speaking of the feeding habits of this bird, a well-known ornithologist observes, "The Sanderling obtains its food principally by probing the moist sands of the seashore with its bill held in an oblique direction. At every step it inserts this instrument with surprising quickness, to a greater or less depth, according to the softness of the sand; sometimes introducing it a quarter of an inch, sometimes to the base. The holes thus made may be seen on the borders of beaches, when the tide is fast receding, in rows of twenty, thirty, or more; in certain spots less numerous: for it appears that when a place is unproductive of the food for which they are searching, they very soon take to their wings and remove to another, now and then in so hurried a manner that one might suppose they had been suddenly frightened. The contents of the stomach of those shot while thus occupied were slender sea-worms, minute shell-fish, and gravel. At other times, when they were seen following the receding waves, and wading up to the belly in the returning waters, the stomachs contained small shrimps and other crustacea." Other writers have observed it feeding on the buds of the Saxifrage.

The Sanderling runs very rapidly, and flies with ease and swiftness; when alarmed, the birds, when in flocks, generally proceed to some fresh feeding spot at no very great distance; but when disturbed in very small parties they not uncommonly take to flight and fly for some considerable distance before settling. As already stated, Sanderlings frequently associate with small companies of Dunlins, &c.; but they may be easily distinguished from their companions by the prominent lightness of their plumage, and the continuous whistling cry uttered during flight.

The Sanderling breeds in the far north, and in much higher latitudes than any part of Great Britain. The coasts of Hudson's Bay, Greenland, and Labrador have been mentioned by naturalists as amongst the favourite breeding-places of this bird. Captain Fielden found a Sanderling's nest in the month of June, 1876, on the shores of the Frozen Ocean; this nest contained two eggs, and as the male bird was killed at the nest, it would appear that both sexes assist in the process of incubation.

The nest is placed on the ground, and is somewhat roughly built of dried grass; the eggs number about four, and are of a dusky colour, spotted with black, most of the markings being on the larger end.

Only one brood appears to be reared during the year, but this is not absolutely certain.

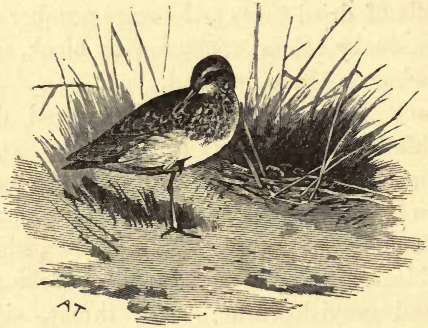
In summer the male Sanderling has the beak black; irides brown; feathers on the top of the head and back of the neck black in the centre, with a rufous edging; back and rump black; wings blackish, with markings of reddish-grey and greyish-white; chin, throat, sides of the neck, and upper part of the breast covered with small spots of rufous and black on a white ground; the whole under-surface of the body is pure white; tail greyish-black in centre, and the outer feathers greyish-white; legs, toes, and claws black.

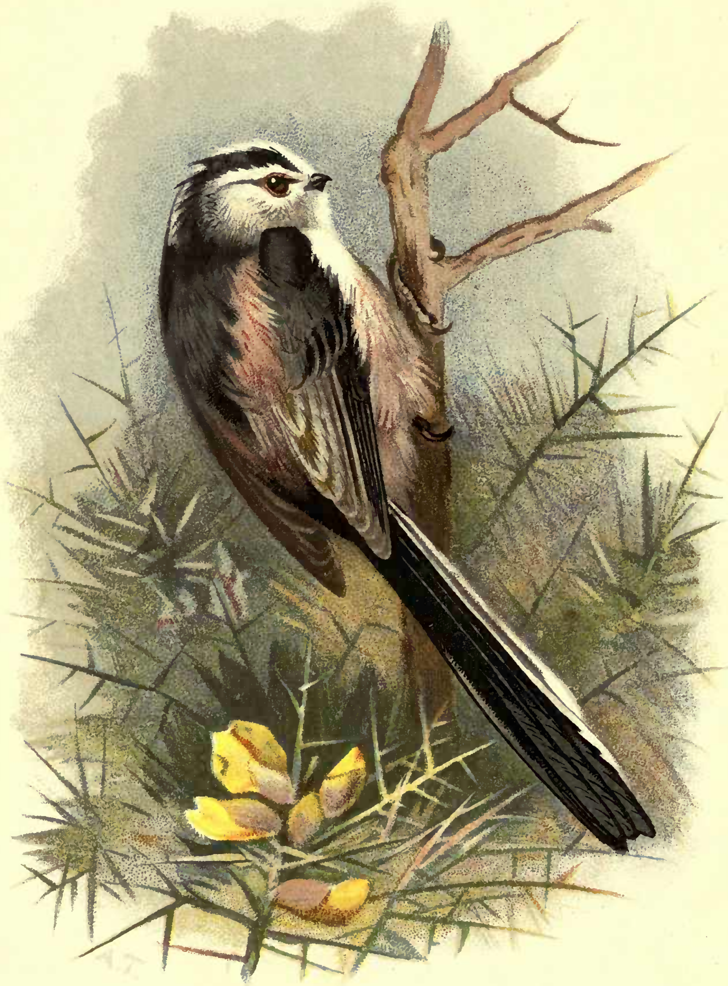
In winter the bird is much lighter in appearance; the plumage of all the upper parts is a very light ash-grey, with a dark streak in the centre of each feather; the tail is ash-colour, edged with white; chin, throat, and remaining portions the same as in summer.

In spring the plumage is even prettier, the feathers on the back being all centred with black, and the front of the neck speckled.

There is not much difference in the plumage of the male and female, but the latter are somewhat larger, and in the summer lighter in colour.

The Sanderling is found in nearly all the Arctic regions, and has been met with on the Black Sea, France, Italy, Holland, South Africa, Japan, and Sunda.



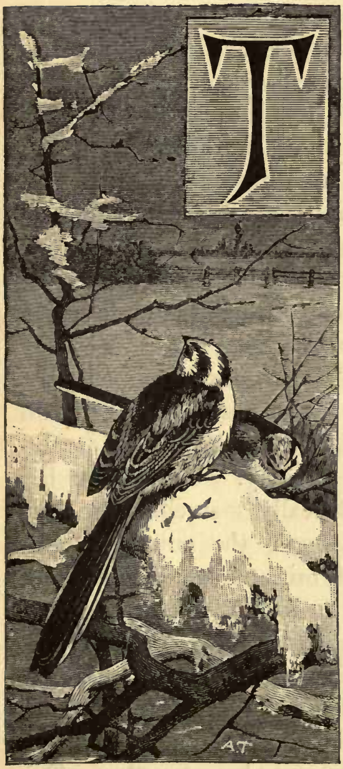


LONGTAILED TITMOUSE

(·45 NATURAL SIZE)

THE LONG-TAILED TIT.

Parus caudatus.



THE Long-tailed Tit, or, as it is very frequently called, the "Bottle Tit," as will be seen by a glance at the illustration, is diminutive in its size and peculiar in its appearance. Dr. Leach and many other naturalists have hesitated to regard this little bird as belonging to the true Tits; and Mr. Yarrell thus points out the differences that suggested the separation :—"The five species of Tits (viz., the Blue, the Crested, the Cole, the Marsh, and the Great Tit) have short tails, almost even or square at the end, the feathers being nearly of uniform length; legs, toes, and claws rather short and strong; their nests are loosely put together, generally placed in holes in walls or trees, and the birds are almost omnivorous in reference to food. The Long-tailed Tit, on the contrary, as its name implies, has the tail long and graduated; three pairs of the tail-feathers not only differing from each other in length, but all of them also shorter than the other three pairs; the legs and toes rather long and slender; the nest of the most perfect kind, oval in shape, domed at the top, with a small hole at the upper part of one side, by which access is gained to the chamber within; the nest is generally fixed in the midst of a thick bush; and the bird is more decidedly insectivorous."

This bird is found more or less frequently in all the wooded districts of this country. In the southern and western counties of England, from Sussex to Cornwall, it is common, frequenting plantations, shrubberies, and hedgerows where the trees are tall, and also gardens and orchards. The food consists almost exclusively of various insects and their larvæ, for which the birds search with considerable persistence and activity.

The nest, to which allusion has already been made, is a perfect specimen of ingenuity and care, and is in all probability the most admirable example of bird architecture to be found in this country. The writer has examined some which seemed really marvellous in their strength, comfort, and appearance; the outside is frequently adorned with scraps of bright-coloured lichen and moss, and the interior thoroughly lined with down and soft feathers. The number of eggs varies; ten or twelve are commonly laid, but occasionally even more: they are small, white, and marked with a few faint specks of red; often, however, they are plain white. During the first autumn and winter the entire family keep together. The usual note is a sharp chirp or twitter, varied by lower and hoarser notes. At times these twitterings are very loud and shrill, and at other times so feeble as to be almost inaudible. When searching for food these little birds assume the most peculiar attitudes, often being engaged with the head downwards, their long tails giving them a somewhat grotesque appearance.

Their movements are full of sprightliness and gaiety, and well repay any watching or observation. The flight is not very strong, and is undulatory in its character.

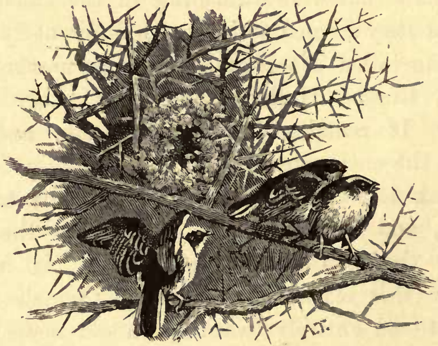
A well-known naturalist states that he has observed these little birds, when insects on the branches were few and far between, making very persistent efforts to feed upon the gnats that were swarming in the sunshine; but he adds that they seemed to be very indifferent fly-catchers.

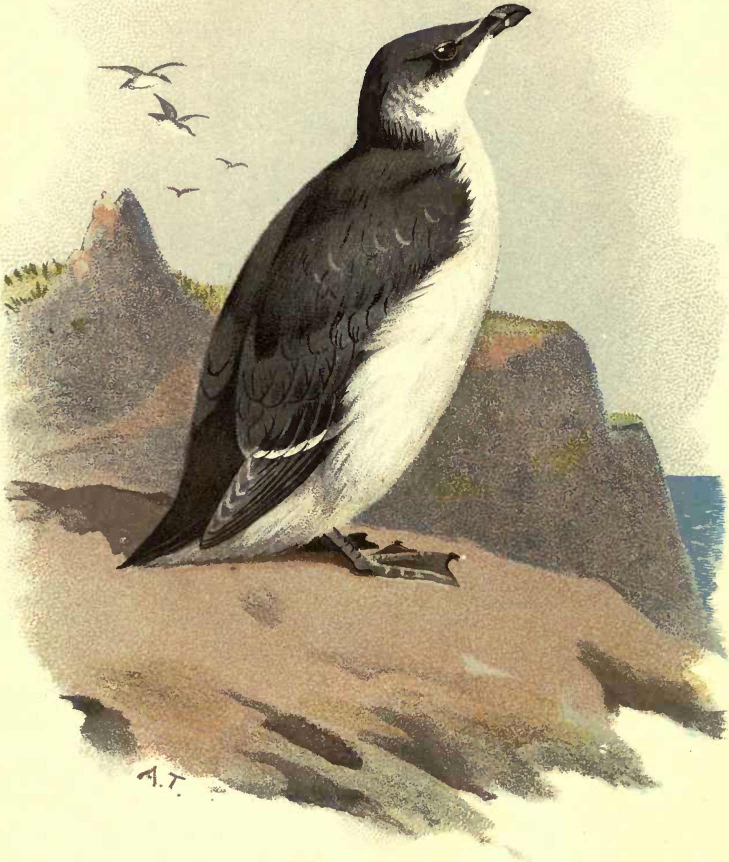
The Long-tailed Tit is said to be a permanent resident in Sweden, Russia, Holland, and many other European countries. It remains in Great Britain and Ireland throughout the entire year.

The beak is black; the irides hazel; the top of the head, nape, and cheeks greyish-white; over the eye, and descending thence over the ear-coverts, is a narrow black stripe (this mark is broader in the females, and said sometimes to be entirely wanting in old males); on the upper part of the back a triangular patch of black, one point of which is directed downwards; the shoulders, scapularies, and part of the rump tinged with rose-red; wing-coverts black; primaries greyish-black; tertials broadly edged with white; upper tail-coverts black; the three pairs of central tail-feathers very long and black; the next three pairs each half an inch shorter than the feather on the same side which precedes it, and all six are black on the inner web, and white on the outer; the under surface of the body greyish-white; the sides, flanks, and under tail-coverts tinged with rose colour; legs, toes, and claws almost black. The length of the bird is about five inches and a half.

The females have more black about the head, the band on the nape and head being broader, but in other respects the plumage resembles that of the males.

In the young birds the tail-feathers are of variable lengths during growth, and the markings are less distinct and pure than in adults.

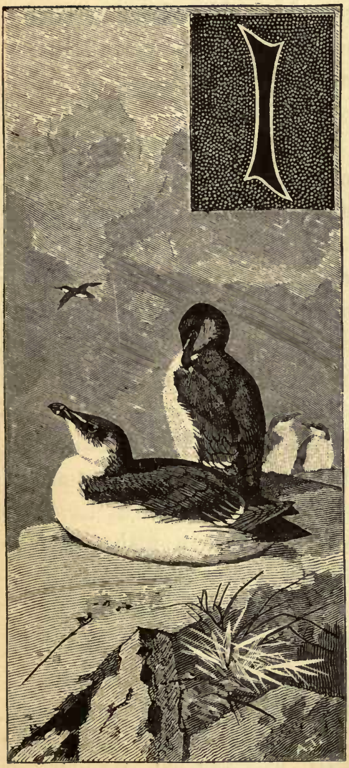




RAZORBILL
(¼ NATURAL SIZE)

THE RAZOR-BILL.

Alca torda.



IF the reader will for a moment glance at the beak of the bird in the illustration he will see that the name "Razor-bill" is a very appropriate one.

The creature to which this peculiarly-shaped appendage belongs is a well-known inhabitant of most, if not all, of the seas surrounding the islands of Great Britain. Like the common Guillemot, it spends most of its time upon the "sad sea waves," and, with the exception of those periods occupied in breeding and rearing its young, it seldom troubles *terra firma* with its presence. It feeds upon the lesser crustacea, and any of the smaller kinds of fishes, pursuing its prey with ease and certainty. It swims and dives equally well, and is quite as capable of securing its food below the water as on the surface. Like most birds of this class, the water is its proper element, and its easy and rapid movements therein offer a great contrast to the clumsy efforts at locomotion when upon dry land. When disturbed and compelled to take to its wings, it rises in the air with difficulty, splashing along on the water for some little distance. The flight is however rapid, strong, and capable of being sustained for a considerable distance, far more powerful than would be imagined by the comparative smallness of the wings.

This bird is probably an exclusively North-Atlantic species. It breeds on the sea rocks (in greater or less numbers) from Cornwall to Shetland, round the coast of Ireland, the Channel Islands and St. Kilda. Nova Scotia, Newfoundland, and Labrador are also stated as localities frequented by the Razor-bill for breeding purposes, as are also the rocky shores of Norway.

The Razor-bill lays but one egg, the measurement of which is about two inches and three-quarters by one inch and ten lines; the grounding is white, and the markings are reddish-brown and blackish-brown, but the eggs are subject to much variation.

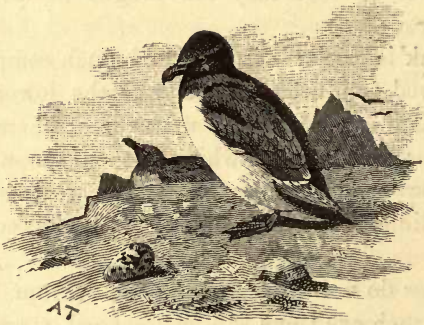
The Razor-bill must be considered as a rather late breeder, as its eggs are seldom found before the middle of May. The birds begin to assemble with Puffins, Guillemots, and Gulls at their breeding-places about the end of March or the beginning of the following month, and the sea, rocks, and precipices are then crowded with vast numbers. According to some authorities, Razor-bills pair for life, and regularly return year after year to the same identical crevice or cranny to deposit their egg and rear their young. In choosing a suitable place in which to deposit its egg the bird almost invariably selects some hole or crevice or cleft in the rock, carefully avoiding ledges and similarly exposed situations. Instances have been recorded in which the egg has been deposited in a Puffin burrow, and even in the deserted nest of a Cormorant. Seebohm states that "both birds share in the task of hatching their solitary egg, and incubation lasts about a month."

It is said that the young Razor-bills are sometimes conveyed to the water in the bill of the old bird, and that on the sea they are taught to dive by their parents.

The beak is black; it is large and much compressed, the end is curved, and the extremity of the lower mandible forms a salient angle with the upper one; there are three transverse grooves and one white line on the upper mandible, and two transverse grooves and a white line on the lower mandible. The basal half of the beak is covered with feathers.

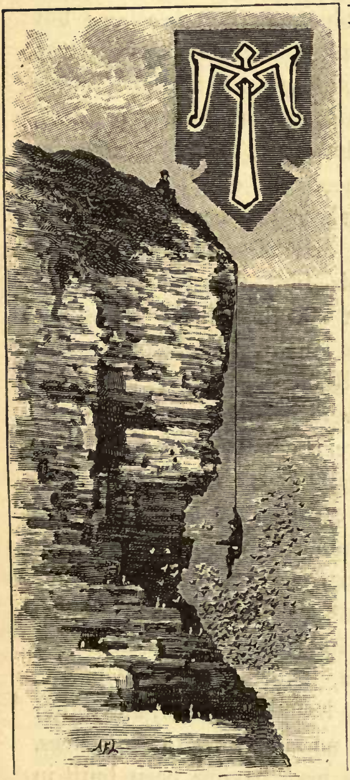
The sexes do not differ in plumage. From the top of the beak to each eye there is a well-defined streak of pure white; irides dark brown; the whole of the head, chin, throat, hind part of neck, back, wings and tail black; the tips of the secondary quill-feathers are white, forming a band across the wing; the breast, and all the under surface of the body pure white; legs, toes, and their membranes brownish-black. The tail is short and pointed. The entire length of the bird is about seventeen inches, being rather larger than the Puffin.

The young birds, when about three weeks old, are covered with down, the whole of the upper part being of a sooty colour, and from the chin to the vent underneath white, the only feathers visible being a few in the wing; but the other feathers grow very rapidly through the down, and the young birds are soon like the adult in plumage, except that the feathers on the neck, throat, and sides of the head are white until after the spring moult, and are only black during the breeding season.



EGGS AND EGG-COLLECTING.

By R. Kearton.



THERE are recorded many curiously interesting exceptions to the general rules adopted by different birds in the selection of a position for their nests, and we cannot better utilise our little remaining space than by mentioning briefly a few well-authenticated cases of entire departures from the usual habits of some well-known specimens. It will be remembered that in our first introduction to "Eggs and Egg-collecting" it was mentioned that a Dipper's nest had been found on the branch of a tree, and a Thrush's on the bare ground in the middle of a field, far away from bush or tree.

House Sparrows furnish many examples of curious situations adopted for incubation purposes. Not long ago a pair of these birds built their nest, and successfully hatched a brood, in the cartridge-box of a cannon which was fired twice daily in the Gun Park at Woolwich. It is a notable fact that in some parts of the country Sparrows build extensively in trees, whilst in others such a circumstance is unknown. Some ornithologists are of opinion that it is an hereditary habit, others supposing that it is resorted to for the sake of coolness in hot weather; but a reason the writer inclines to is that in parts of the country where houses and out-buildings are made of stone the birds find ample accommodation in joints, crevices, and crannies where the lime has been dislodged, and are therefore not driven to the necessity of adopting trees, like birds found in districts where the houses are made of bricks, consequently closer, and affording less opportunity for nest-building. This bird, besides its noted pugnacity, is an arrant rogue, and invariably takes advantage of the House Martin's labour. We have known a house with twenty nests all close together under its eaves, about half of which were occupied by Sparrows, which had, in some cases where the nests were new, been actually watched ejecting the eggs of the original owner.

The Robin is noted for its caprice in the selection of a nesting site, and has been found hatching its eggs in nearly every conceivable situation, from the ordinary mossy bank to the pocket of a gardener's old coat which had been hanging undisturbed for several weeks in a tool-house. Old kettles, water-cans, inverted plant pots, &c., in buildings close to machinery in daily motion, and other equally curious places, are by no means rare occurrences. A case is recorded of a Robin's nest having been built in the hole made by a cannon-ball through the mizenmast against which Lord Nelson was standing when he received his death-wound on board the *Victory*.

Swallows have also been known to adopt quite foreign situations for breeding purposes, such as holes in trees, and even openly on the branches.

Cases are known of the Starling building its nest down holes in the earth, and also quite exposed in trees, similar to the nest of the Sparrow. It has also been found going shares with a Magpie.

The Pied Wagtail occasionally chooses strange quarters, one case being on record of a pair building beneath a railway switch, over which trains passed nearly every hour in the day within a few inches of the nest.

The roof of a house in Hull was once selected by two pairs of Rooks for nidification, and proved a successful choice, for they managed to build nests and rear their young.

The Common Wild Duck is also liable to depart widely from her usual habit in the selection of a site for her nest, sometimes adopting a Crow's nest, and even the tower of a church, which latter has occasioned much speculation amongst naturalists as to how the parent bird managed to convey her progeny safely to water.

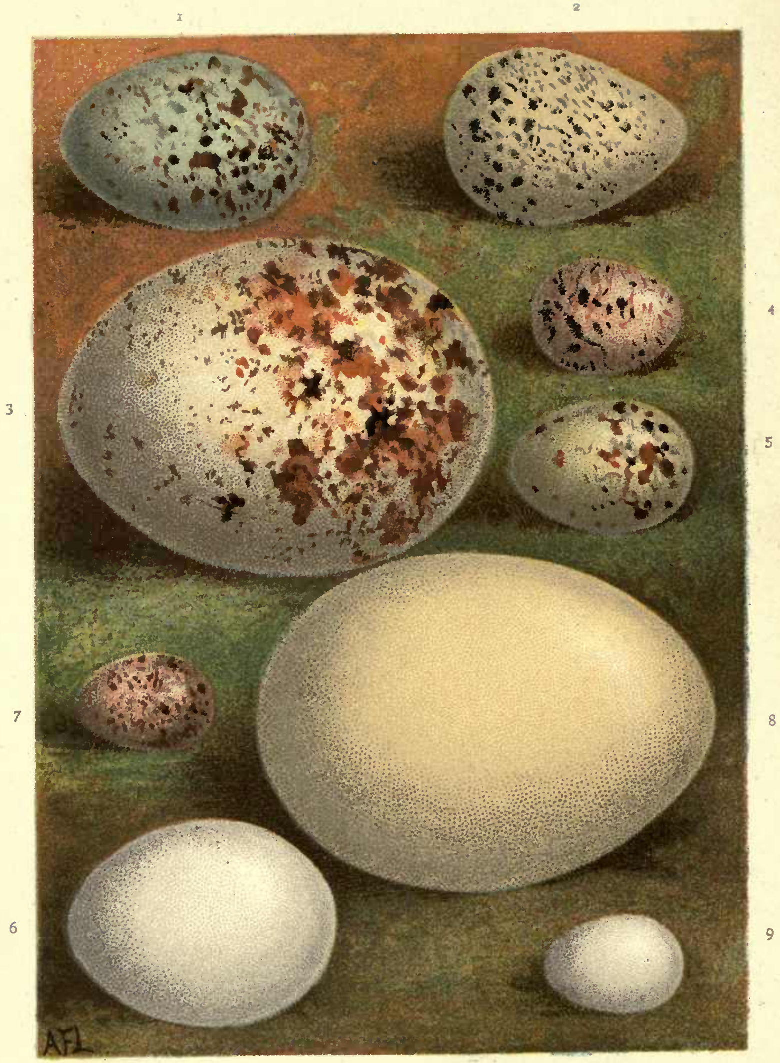
The Flycatcher is amongst the foremost of our eccentric birds in the choice of breeding quarters, its nest having been found in street lamps in different parts of the country, and in one instance on the head of a hoe hanging against the wall of a tool-house. The nest was removed whilst the hoe was being used, and, when replaced, the birds, instead of deserting it, resumed operations, and eventually reared their brood.

Another very interesting curiosity of recent date occurred in the neighbourhood of Skegness, where a pair of Marsh Titmice selected a farmer's letter-box for incubation purposes, and although it was opened twice daily, and the materials with which the birds began to build were several times cleared away, they doggedly persisted in their efforts, and eventually succeeded in making a nest and depositing the usual number of eggs.

These odd positions and situations are evidently not chosen for purposes of concealment from man, at any rate; indeed, it is a question whether some of them are not adopted to secure the advantage his presence affords against the incursions of predatory birds and animals. And, on the other hand, if these seeming departures from instinct be admitted as due to reason, it seems strange that whilst some birds are capable of this, others exhibit what seems to human understanding profound stupidity. We have known birds vainly try to build in positions where it was impossible for a nest to rest, each piece of material falling to the ground, until sufficient had been collected for half a dozen nests; yet the bird kept on collecting sticks, moss, and grasses, until probably she was obliged to drop her eggs in the fields. This is not a solitary instance, nor only once attempted, for close observation proved that the same inexplicable vain effort was continued from year to year, but whether by the same birds or not it is of course impossible to say.

THE RING OUZEL.

The mountainous districts of the north of England and Scotland are the favourite nesting-places of this bird, which seems most at home in lonely secluded districts.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EGGS.

1. Ring Ouzel. 2. Kentish Plover. 3. Buzzard. 4. Cirl Bunting.
5. Hawfinch. 6. Stock Dove. 7. Dartford Warbler. 8. Pochard. 9. Black Redstart.

The situation of the nest, its materials and structure, also the eggs of the Ring Ouzel and Blackbird, differ but little, and we have often had a difficulty in determining the rightful owner of a nest, until the parent bird has been watched on or off. The nest is composed of coarse grass, moss, and mud, with an inner lining of finer grass, and is generally situated in clefts of rock, steep banks, or old walls, sometimes quite on the ground. The eggs number four or five, of a dull bluish-green, freckled or blotched with reddish-brown, markings generally larger and fewer than those of the Blackbird.

THE KENTISH PLOVER.

No trouble is taken by this bird in nest-building, simply depositing its eggs in some depression or hollow of the sand or shingle on the southern coasts of England, principally Kent and Sussex. The eggs number four, and are of a cream, stone, or pale testaceous-brown colour, streaked and spotted with black.

THE BUZZARD.

The Buzzard sometimes builds a nest of sticks, hay, leaves, and wool; at others adopts a crow's nest in some moderately high tree. Her eggs number two, three, and even four, and are of a dingy white; sometimes this colour alone, and at others spotted and blotched at the larger end with red-brown.

THE CIRL BUNTING.

Some low bush or furze is generally adopted by this bird for its nesting-place. The nest is composed of dry grass, roots, and moss, with generally an inner lining of hair, but sometimes without either moss or hair. The eggs number four or five, of a dull bluish or cinereous white with irregular streaks of dark brown, often terminating in a spot at one end.

THE HAWFINCH.

The Hawfinch builds in various kinds of trees and at various heights; sometimes its nest is found quite exposed in a whitethorn bush, or on the horizontal branch of an oak. It is built of twigs, &c., intermixed with lichens, and interlined with fine fibrous roots and hair. Her eggs number from four to six, of a pale olive-green colour, irregularly streaked with dusky grey and spotted with black. The ground-colour is variable, being sometimes of a buffish hue.

THE STOCK DOVE.

Rabbit-holes, cavities in the trunks of trees, and often on the ground beneath thick furze-bushes, which are next door to waterproof on account of their thickness, are the situations chosen by the Stock Dove. Very little trouble is taken with the nest, which merely consists of a few twigs and roots. The eggs only number two, of a pure shining white.

THE DARTFORD WARBLER.

Thick furze-bushes are the places chosen by this bird for its nesting-place on the commons of Kent and Surrey. The materials used are dead branches of furze, moss, and dry grass mixed with wool, and lined inside with finer dead grasses, the whole structure being loosely put together. The eggs number four or five, and are of a greenish, sometimes buffish, white ground speckled all over with dark or olive brown and cinereous, which become more dense at the larger end and form a zone. The eggs are at times more numerously spotted than at others; then the markings are not so large.

THE POCHARD.

This bird breeds on the borders of the meres in Holland, in America, Russia, and Germany; and, though only a visitor on our shores, has been said to breed at Scarborough and in Norfolk. The position of its nest is similar to that of the Wild Duck, also the materials of which it is composed (dead grass and sedge, also down when the bird has begun to sit). Its eggs number from seven even to thirteen, but ten is the usual number laid, of a greenish-buff colour.

THE BLACK REDSTART.

This well-known visitor breeds in many parts of Europe and North Africa, building a nest very similar to that of the Robin, composed chiefly of twigs, straw, dried grass, &c., and situated in holes of walls and other positions similar to the above-mentioned bird. Five is the usual number of eggs; however, four only, or as many as six, are found, generally pure white in colour, occasionally tinged faintly with brown. Cases are recorded where they have been found spotted at the larger end with minute brown spots.

THE SPOTTED FLY-CATCHER.

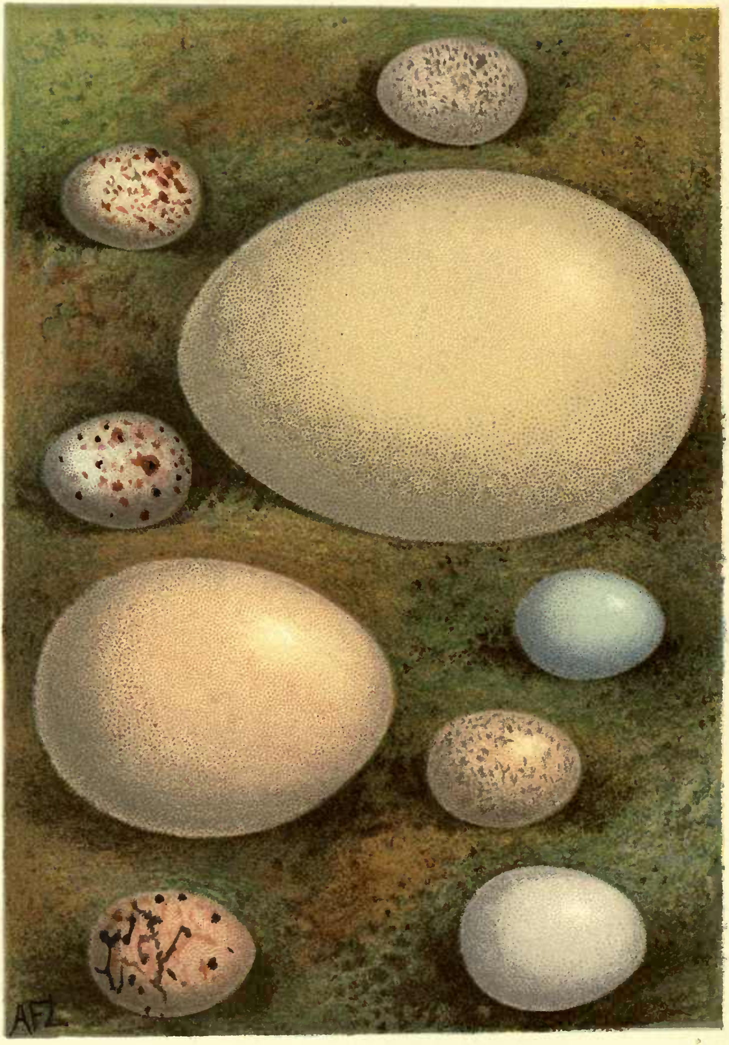
Many curious positions for rearing a family have been chosen by the Spotted Fly-catcher, but its nest is generally found in trees which are trained against walls, barns, tool and summer houses. It is composed of a diversity of material, and no fixed rule seems to be adhered to—bents, straws, moss, new and old hairs, feathers, &c. The eggs number four, five, or even six, of a grey-white spotted with faint red; sometimes, but rarely, pale blue, unspotted. The ground-colour varies from grey or bluish-white to pea-green, the markings also being in various shades, clouded, spotted, and blotched with faint red or reddish-brown.

THE TREE SPARROW.

Holes in pollard and other trees are chosen as desirable situations by this bird for perpetuating its race, and sometimes in the thatches of old barns along with the Common House Sparrow. Its nest is very similar to that of its more widely-distributed and better-known kinsman, viz., of hay, dry grass, and straw, with a liberal lining of nice warm feathers. The eggs generally number four or five, of a grey colour, thickly spotted with umber-brown or darker grey, sometimes white with grey spots or blotches, and may be described, like the Common Sparrow's, as variable.

THE BRAMBLING.

Scandinavia and other countries situated in high latitudes are the breeding-haunts of this little bird, which builds a nest very similar to the Chaffinch. It is placed fourteen or twenty feet from the ground, in the fork of a branch shooting out from the trunk of a birch or spruce fir-tree, and composed of moss, lichens, bark, mixed with thistle-down, and lined with fine grass and feathers. Its eggs



EGGS.

1. Spotted Fly-catcher. 2. Tree Sparrow. 3. Brambling. 4. Winchat. 5. Scoter.
6. Grey Wagtail. 7. Smew. 8. Black-headed Bunting. 9. Great Spotted Woodpecker.

number from five to seven, similar to those of the Chaffinch, the ground-colour being generally green, and the spots not so dark nor large.

THE WHINCHAT.

THE nest of this bird is composed of grass and moss of different kinds, the stronger on the outside, and the finer forming a lining for the interior, and is situated on the ground in positions where it is by no means an easy task for the most veteran collector to find it. It lays five or six eggs of a delicate bluish-green, rarely speckled or marked with red-brown.

THE SCOTER.

ICELAND and Scandinavia are the nesting-places of the Common Scoter, which gathers together any easily procurable materials, such as twigs, grasses, dry stalks, and leaves, placing them under cover, or in hiding, afforded by the low-growing shrubs or plants, and lining the whole with down. The eggs number from six to ten, of a pale greyish buff-colour, sometimes slightly tinged with green.

THE GREY WAGTAIL.

SOME naturalists describe the position of this bird's nest as on the ground; but, personally, we have generally found them in the niches of rocks, or under overhanging ledges or banks. The nest is composed of moss, bents, grass, horsehair, often lined with a coat of cow's-hair, which they rub off against walls and trees in the spring-time. This bird's eggs number five or six, and are of a grey colour, mottled and spotted with ochre-grey or brown, variable.

THE SMEW.

The nesting-place of this bird is in high latitudes, such as north-east Russia, and the situation chosen is in the hollow trunk of a tree. The material of which the nest is composed is taken from the bird's body, and consists entirely of down. Her eggs number from seven to eight, very similar to those of the Wigeon, creamy-white in colour, fine-grained, and rather glossy.

THE BLACK-HEADED BUNTING.

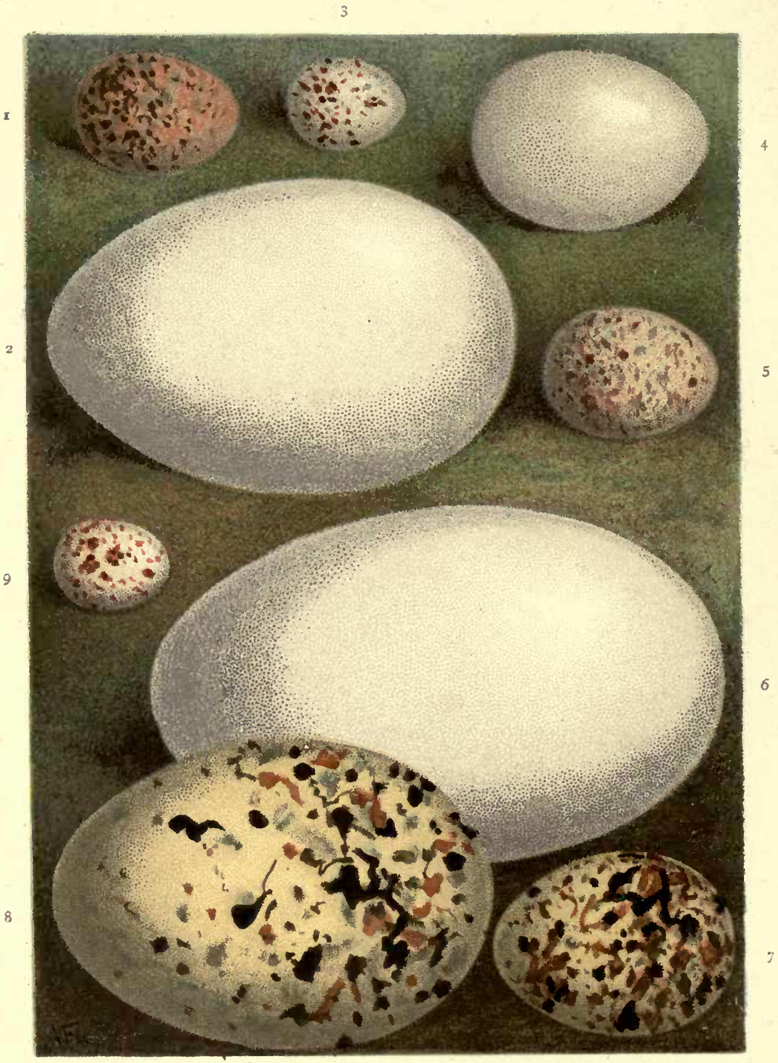
Moist swampy localities are chosen by this bird as the situation for its nest, which is composed of dried grass, moss, and an inner lining of finer grass, reed-down, or horsehair, and generally, though not always, placed on the ground, among rushes or coarse long grass. It lays four or five eggs of a pale reddish-brown or grey with a rosy tinge, streaked, veined, and spotted with brown of a rich dark purple shade.

THE GREAT SPOTTED WOODPECKER.

The position of the Woodpecker's nest is in the hollow trunk of some tree, and if the hole leading to it is too large, the parent bird invariably plasters it up to the proper size for ingress and egress with clay. The eggs are laid on pieces of wood chipped off inside, and number four or five, white, occasionally stained or dyed by the material on which they are laid.

THE ROCK PIPIT.

Ledges or crevices of rocks near the sea-shore are the favourite building-places of this bird. It collects such



EGGS.

1. Rock Pipit. 2. Cormorant. 3. Creeper. 4. Turtle Dove.
5. Shore Lark. 6. Gannet. 7. Quail. 8. Oyster-catcher. 9. Cole Tit.

materials as dry grasses of various kinds, and seaweed, with an inner lining of fine grass, and occasionally horsehair. Its eggs number four or five, of a grey ground-colour, occasionally slightly tinged with green. The spots are variable in shade, being sometimes greyish-brown, at others reddish; the underlying ones are always light grey. The spots are small, and more crowded at the larger end.

THE CORMORANT.

ROCKY coasts are chosen by the Cormorant, which builds an ample nest of sticks, seaweed, and coarse grass on some ledge or shelf of sea cliff. Her eggs number from four to six, of a chalky-white colour, varied with pale blue or greenish tinge, which is really the colour of the proper shell, the white being only a rough coat.

THE CREEPER.

THIS little bird generally builds its nest in a hollow tree, its materials being fine twigs, dead grass, moss, and feathers, and lays from six to nine eggs of a white ground-colour, speckled with red-brown at the larger end, much resembling those of the Willow Wren and Blue Titmouse.

THE TURTLE DOVE.

THICK woods, and principally in Kent, are the favourite nesting-places of this Dove, which builds a loose nest of sticks and twigs carelessly thrown together high up in a fir, holly, or other bush. The eggs number two, quite white, and much smaller for the size of the bird than the Ring and Stock Doves.

THE SHORE LARK.

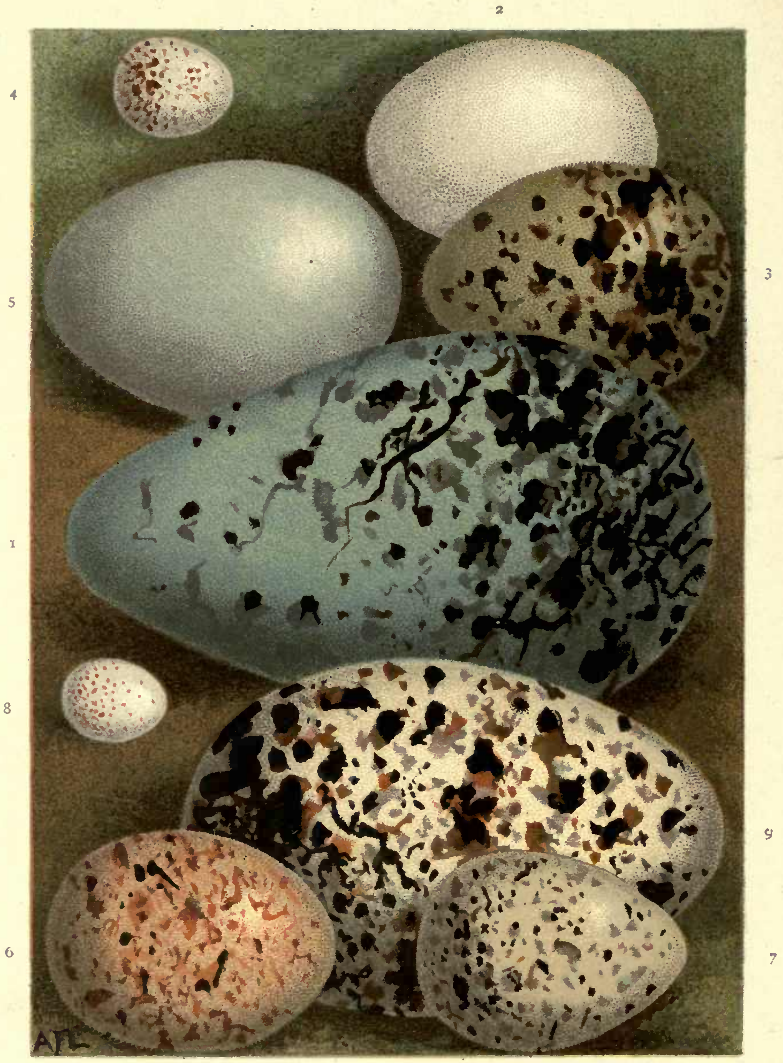
Cold northern climates, like Lapland and Siberia, are chosen by the Shore Lark for breeding-places. Its nest is generally situated in some slight hollow on the ground, and is loosely made of grass, with an inner lining of willow-down or hair from the reindeer. Her eggs number three, four, or five, the second figure being the general rule, and are, like those of the Common Lark, liable to variation in colouring. The ground-colour is of a brownish or pale green, tinted white, marked with neutral brown spots often so profuse that they cover the greyer spots underlying entirely out.

THE GANNET.

This bird seems to prefer just the opposite course to that which most birds adopt in the breeding season, viz., to congregate in thousands, and breed on precipitous rocks, engaging all ledges and shelves capable of holding a nest, which is composed of seaweed and other rubbish picked up by the bird from the ocean, also grass. One egg only is laid, white or bluish-white when first deposited on the nest, but soon becoming dirty and soiled by being trodden upon. Like the Cormorant, this bird's egg is covered with an incrustation of white, hiding the colour of the true shell, which is of a greenish or bluish-white.

THE QUAIL.

Green cornfields are generally the situations chosen by the Quail for a nesting-place, where it selects a small depression in the ground, and tramples a few blades of grass or corn down into it, occasionally a few dead leaves. Her eggs number from seven to even as many as twenty, of a pale



EGGS.

1. Guillemot. 2. Rock Dove. 3. Dotterel. 4. Marsh Tit. 5. Little Auk.
6. Red-legged Partridge. 7. Sanderling. 8. Long-tailed Titmouse. 9. Razor Bill.

yellowish-brown, mottled and clouded or blotched with red or olive brown; variable both in ground-colour and markings.

THE OYSTER-CATCHER.

This bird lays its eggs, which number three or four—three being the general rule—on the bare ground, mostly in slight declivities, taking care that they are above high-water-mark. Sometimes a few bents, pebbles, or broken shells are used as a sort of lining. The eggs are stone or cream colour, of a variety of shades, blotched with dark brown, occasionally streaked and spotted with a lighter hue. The markings are variable in character and position, some being pretty equally distributed over the eggs, whilst others are inclined to form a belt round the larger end.

THE COLE TIT.

Trunks of trees, holes in walls and banks made by rats, moles, or mice, are selected for incubation purposes by this little bird. The nest is built of moss, wool, and hair, and contains from five to eight, or even nine eggs, white, spotted and freckled with light red or red-brown.

THE GUILLEMOT.

The Guillemot makes no nest at all, but deposits its single egg on the ledges of sea-cliffs in a great many places round our coasts. A verbal description of it is almost useless, as the colouring presents such a wonderful variety of tints. The ground-colours are white, cream, yellowish-green, blue, reddish-brown, pea-green, purplish-brown, &c. Some are profusely spotted and blotched or streaked with black, black-brown, or grey in great variety; whilst others are scarcely marked at all. Our illustration may be taken as a very good specimen of one kind of colouring and marking, though a very pretty one might be given of an entirely different colour and character.

THE ROCK DOVE.

Ledges and fissures or crevices in sea-cliffs are the nesting-places of this bird, which uses sticks, twigs, heath, and dead grass for building purposes. Her eggs are two in number, quite white.

THE DOTTEREL.

Mountain-tops in the North of England are the favourite nesting-places of the Dotterel, which is now becoming comparatively rare in districts where it was once common. It uses no materials for nest-making, simply laying three eggs in a slight cavity amongst woolly-fringe moss or other mountain vegetation which affords some little concealment. The eggs are of a dark cream or olivaceous-brown colour thickly blotched or spotted with dark brown or brownish-black.

THE MARSH TIT.

Holes in trees (generally willows or pollards), banks, &c., are the places adopted by the Marsh Tit for its nest, which is composed of moss, wool, and down from rabbits, or the ripe catkins of willows. Her eggs number from six to eight, or even as many as ten have been found. They are white, spotted with red-brown, more thickly at the larger end.

THE LITTLE AUK.

The rocky shores of Spitzbergen, Greenland, and Iceland form suitable breeding resorts for this bird, which makes no nest, but deposits its single egg on the bare ground in some crevice or under loose rocks. The egg is of a pale greenish-blue, or white tinged with greenish-blue, a little spotted and veined, especially at the larger end, with rust-colour or yellowish-brown. Sometimes the egg has no spots or streaks, at others only indistinctly streaked or veined at the large end.

THE RED-LEGGED PARTRIDGE.

THIS bird makes a slight nest of bents and leaves upon the ground in grass, corn, or clover fields; however, instances have been cited where it has been found at considerable elevation. But this departure from the general rule we have noticed with other birds on rare occasions. Her eggs number from twelve to eighteen, of a yellow-grey or cream colour, marked with red or cinnamon-brown.

THE SANDERLING.

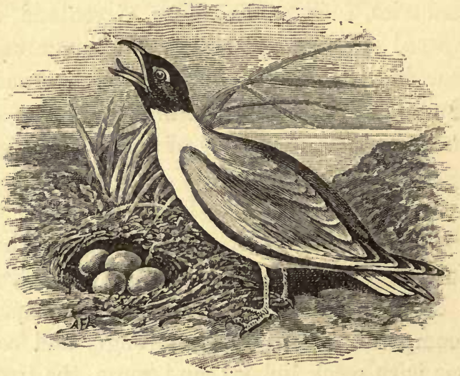
THE Sanderling is only a visitor to our shores, and breeds in Arctic countries, such as Labrador, Greenland, &c. Its nest is composed of grass and built upon the ground. The eggs are four in number, of a buffish-olive ground-colour, spotted and mottled plentifully with dark brown or black, also with indistinct sub-markings of a greyish tinge.

THE LONG-TAILED TIT.

TREES and bushes are the positions taken up by this skilled little architect and builder, whose beautiful work wins the admiration of all naturalists. It is oval in shape, and of large size compared with the bird, strongly and compactly put together with wool, lichens, and moss, the two former of which adhere very closely when they once become entangled. A small hole is left on one side, pretty high up, for ingress and egress, and the inside is lined with feathers, which make it as warm and comfortable, at least to the human understanding, as the outside is compact. The eggs number from seven to ten, and even sixteen or twenty, which are probably the production of more than one bird; white or rosy-white until blown (by reason of the yolk showing through the thin transparent shell), with very small reddish-brown spots round the larger end.

THE RAZOR-BILL.

The Guillemot and Razor-Bill appear to be very much alike in the choice of their position for breeding purposes, and alike only lay one egg each; but that of the latter differs very much from the former in diversity of colouring. It is white or buffy-white, spotted and blotched with black, chestnut, or reddish-brown.



CLASSIFIED INDEX.

The arrangement followed in this Index is that of the editors of the last (fourth) edition of Yarrell's "British Birds." The first of the scientific names of species is that used by them, in conformity with the code of rules adopted by the Nomenclature Committee of the British Association. Then follow other synonyms, when such have been mentioned in the text.

ACCIPITRES.

Birds of prey. Bill strong, curved, sharp-edged, often armed with a lateral tooth, cere at base, nostrils open; body very muscular; legs robust, short, with three toes in front and one behind, all armed with long curved claws; wings commonly pointed and of considerable size, flight usually rapid and powerful; primaries ten, wing-coverts large; tail with twelve or fourteen feathers.

FALCONIDÆ (*FALCONS*).

Head plumose; nostrils lateral, more or less rounded, open, and situated in cere; external toes especially connected with the middle toe.

Accipiter nisus, SPARROWHAWK, II. 9
Aquila chrysaëtus, GOLDEN EAGLE, III. 129
Buteo vulgaris (Falco buteo), BUZZARD, IV. 9
Falco æsalon, MERLIN, III. 5
Falco candicans (F. gyrfalco), GYR FALCON, II. 121
Falco peregrinus (F. communis), PEREGRINE FALCON, II. 93
Falco tinnunculus, KESTREL, I. 53
Haliæetus albicilla (Aquila albicilla), WHITE-TAILED EAGLE, III. 113
Milvus ictinus (M. vulgaris, Falco milvus), KITE, III. 73

STRIGIDÆ (*OWLS*).

Head large, with large projecting eyes, directed forwards and surrounded with a circle or disc (more or less developed according to the more or less nocturnal habits of the genus); beak hooked, short, covered at base by recumbent bristles; nostrils at anterior margin of cere; tarsi covered with dense plumes.

Asio otus (Strix otus, Otus vulgaris), Long-eared Owl, III. 89
Aluco flammeus (Strix flammea), Barn Owl, I. 137
Strix aluco (S. stridula), Tawny Owl, III. 137

PASSERES.

Legs slender, short, with three toes before and one behind, the two external toes united by a very short membrane.

LANIIDÆ (*SHRIKES*).

Bill short or moderate, strong, compressed, notched at tip, or furnished with a tooth at each side; primaries mostly ten (the first short), in a few nine; wing-coverts short; tarsi moderate or short, covered anteriorly with transverse scutes, continuous scute at side.

Lanius collurio, Red-backed Shrike, II. 129

MUSCICAPIDÆ (*FLY-CATCHERS*).

Bill broad at base, with tip curved, emarginate; rigid bristles at base of bill; primaries ten, first short; wing-coverts short; tarsi covered anteriorly with transverse scutes, posteriorly and on both sides with a continuous scute.

Muscicapa atricapilla, Pied Fly-catcher, III. 41
Muscicapa grisola, Spotted Fly-catcher, IV. 37

CINCLIDÆ (*DIPPERS*).

Bill slender, nostrils linear, in lower edge of basal membrane, no bristles or bristly points about the mouth; body very short and broad; wings short, rounded, and concave, with ten primaries; feet as in the Turdidæ.

Cinclus aquaticus, Dipper, Water Ouzel, II. 73

TURDIDÆ (*THRUSHES*).

Bill emarginate at tip, compressed, in most moderate, in a few longer than head; primaries ten, first very short; wing-coverts short; tail long and broad; tarsus longer than middle toe, covered on anterior surface above with a continuous horny coat, below with transverse scutes; outer toe longer than inner, united to middle toe at base, hind toe long and strong.

Turdus iliacus, Redwing, III. 97
Turdus merula, Blackbird, I. 105
Turdus musicus, Thrush, I. 81
Turdus pilaris, Fieldfare, II. 137
Turdus torquatus (Merula torquata), Ring Ouzel, IV. 1
Turdus viscivorus (Merula viscivora), Missel Thrush, II. 81

SYLVIIDÆ (WARBLERS).

Distinguished from the family Turdidæ by their more delicate structure and more subulate bill.

Accentor modularis, Hedge Sparrow, II. 69
Acrocephalus nævius (Sylvia locustella), Grasshopper Warbler, III. 125
Daulias luscinia (Sylvia luscinia, Motacilla luscinia, Philomela luscinia), Nightingale, I. 129
Erithacus rubecula (Sylvia rubecula, Erythaca rubecula), Robin, I. 57
Melizophilus undatus (Sylvia Dartfordiensis, Motacilla provincialis), Dartford Warbler, IV. 25
Phylloscopus collybita (Sylvia rufa, S. hippolais), Chiff Chaff, II. 61
Regulus cristatus (Motacilla regulus, Sylvia regulus), Golden-crested Wren, I. 73
Ruticilla phœnicurus (Phœnicura ruticilla, Sylvia phœnicurus), Redstart, I. 93
Ruticilla titys (Sylvia tithys, Phœnicura tithys), Black Redstart, IV. 33
Saxicola œnanthe (Motacilla œnanthe), Wheatear, III. 25
Saxicola rubetra (Motacilla rubetra), Whinchat, IV. 49
Saxicola rubicola (Sylvia rubicola, Motacilla rubicola), Stonechat, III. 21
Sylvia atricapilla (Motacilla atricapilla), Black Cap, II. 17
Sylvia curruca (S. sylviella), Lesser Whitethroat, III. 105
Sylvia rufa (S. cinerea, Motacilla cinerea), Whitethroat, I. 77
Sylvia salicaria (S. hortensis), Garden Warbler, II. 77

TROGLODYTIDÆ (WRENS).

Bill usually without notch; nostrils varied, exposed, or not concealed by feathers, and generally overhung by a scale-like membrane; wings much rounded, about equal to tail, which is graduated; primaries ten; basal joint of middle toe usually united to half of basal joint of inner, and the whole of that of outer, or more; tarsi scutellate.

Troglodytes parvulus (T. europæus, Sylvia troglodytes), Common Wren, I. 33

CERTHIIDÆ (*CREEPERS*).

Bill slender, much compressed, and curved; primaries ten, first less than half the second; tail long, wedge-shaped, feathers stiffened and acute; outer lateral toe much the longest, hind toe exceeding both middle toe and tarsus, which is scutellate in front and very short; outer basal joint of middle toe united to those on each side.

Certhia familiaris, CREEPER, IV. 81

PARIDÆ (*TITS*).

Bill shorter than head, not notched or recurved at tip; nostrils rounded, basal, concealed by dense bristles or bristly feathers; tarsus distinctly scutellate in front, longer than middle toe and claw, which are about equal to the hinder, soles of toes widened into a palm; primaries ten, wings rounded, equal to or shorter than the rounded tail; body compressed, with soft, lax plumage.

Acredula caudata (Parus caudatus), LONG-TAILED TIT, IV. 137
Parus ater, COLE TIT, IV. 105
Parus cœruleus, BLUE TIT, II. 13
Parus major, GREAT TIT, I. 109
Parus palustris (P. atricapillus), MARSH TIT, IV. 121

SITTIDÆ (*NUTHATCHES*).

Closely allied to Paridæ, of which this family has the general characters, differing from it in the body being depressed, with compact plumage; bill equal to or longer than the head; wings much pointed, much longer than the nearly even tail; tarsus shorter than middle toe and claw, which are about equal to the hinder; toes without palms.

Sitta cæsia (S. europæa), NUTHATCH, I. 101

MOTACILLIDÆ (*WAGTAILS*).

Bill short, rarely moderate, mostly slender, straight or somewhat curved, compressed toward tip, emarginate; primaries nine; wing-coverts short; tarsus slender, mostly long, covered anteriorly with distinct transverse scutes, coalescent in some, or with continuous horny scutes; outer toes conjoined at base alone.

Anthus obscurus (A. aquaticus, Alauda obscura), ROCK PIPIT, IV. 73
Anthus pratensis (Alauda pratensis), MEADOW PIPIT, TITLARK, III. 37
Anthus trivialis (A. arboreus, Alauda trivialis), TREE PIPIT, III. 45
Motacilla lugubris (M. yarrellii, M. alba), PIED WAGTAIL, II. 37.
Motacilla sulphurea (M. boarula), GREY WAGTAIL, IV. 57

ALAUDIDÆ (*LARKS*).

Head crested; bill cylindrical, mostly short, with tip entire; nostrils oblong, at base of bill, concealed by feathers and bristles directed forward; wings very long, primaries ten, first primary spurious or apparently wanting; wing-coverts short; tarsus longer than middle toe, covered before and behind with transverse scutes; outer toes conjoined at base only, hind claw considerably lengthened, straight or slightly curved.

Alauda arborea, Woodlark, III. 1
Alauda arvensis (A. vulgaris). Skylark, III. 53
Otocorys alpestris (Alauda alpestris, A. cornuta), Shore Lark, IV. 89

EMBERIZIDÆ (*BUNTINGS*).

Bill rather flattened above, straight, edges waved, commissure angulated, a hard knob on palate of upper mandible, lower mandible laterally compressed so as to form a sort of anvil for this knob; nostrils partly hidden by short feathers; wings pendent and pointed, with nine primaries; tarsus moderate, scaled, hind toe longer than inner.

Emberiza cirlus, Cirl Bunting, IV. 13
Emberiza citrinella, Yellow-hammer, II. 117
Emberiza miliaria, Common Bunting, II. 113
Euspiza melanocephala (Emberiza schœniclus), Black-headed Bunting, IV. 65

FRINGILLIDÆ (*FINCHES*).

Bill very short, abruptly conical, and robust, commissure strongly angulated at base of bill; wings long and pointed, with nine primaries; tarsus short, and scutellated in front, the sides with two undivided plates meeting behind along the median line as a sharp posterior ridge.

Carduelis elegans (Fringilla carduelis), Goldfinch, I. 1
Carduelis spinus (Fringilla spinus), Siskin, I. 85
Coccothraustes chloris (Fringilla chloris), Greenfinch, I. 89
Coccothraustes vulgaris (Loxia coccothraustes), Hawfinch, IV. 17
Fringilla cœlebs, Chaffinch, I. 17
Fringilla montifringilla, Brambling, IV. 45
Linota cannabina (Fringilla linota), Linnet, I. 25
Linota rufescens (Fringilla linaria, Linaria minor), Redpoll, I. 61
Loxia curvirostra, Crossbill, I. 141
Passer domesticus (Fringilla domestica), House Sparrow, I. 41
Passer montanus, Tree Sparrow, IV. 41
Pyrrhula europæa (Loxia pyrrhula, Pyrrhula vulgaris), Bullfinch, I. 9.

STURNIDÆ (*STARLINGS*).

Bill straight, slender, and without bristles at the gape; wings with ten primaries, the first rudimentary, the second longest; tarsus moderately long, scutellated in front, plated behind.

Sturnus vulgaris, STARLING, I. 13.

CORVIDÆ (*CROWS*).

Bill large and conical, or long and curved, emargination sometimes well-developed, sometimes quite obsolete; nasal fossæ and nostrils usually more or less concealed by narrow stiffened bristles or bristly feathers; primaries ten, wings rounded, first primary almost always more than half the length of the second; tarsus scutellated in front, feet and claws strong, basal joint of middle toe united about equally to lateral toes for about half the length.

Corvus corax, RAVEN, I. 21.
Corvus cornix (Corvus cinerea), HOODED CROW, II. 101
Corvus corone, CARRION CROW, II. 1
Corvus frugilegus, ROOK, I. 29
Corvus monedula, JACKDAW, I. 45
Garrulus glandarius (Corvus glandarius), JAY, I. 37
Pica rustica (Corvus picus), MAGPIE, I. 5
Pyrrhocorax graculus (Corvus graculus, Fregilus graculus), CHOUGH, II. 133

HIRUNDINIDÆ (*SWALLOWS*).

Bill short, triangular, very broad at base, narrowing rapidly to a compressed notched tip, mouth opening nearly to the eyes; primaries nine, wings long, pointed; tail generally forked, with twelve feathers; feet weak, tarsus scutellate, shorter than middle toe and claw.

Chelidon urbica (Hirundo urbica), MARTIN, II. 65
Cotile riparia (Hirundo riparia), SAND MARTIN, III. 81
Hirundo rustica (H. domestica), SWALLOW, II. 5

PICARIÆ.

Primaries always ten; tail-feathers commonly ten (eight to twelve); hallux inconsiderable, weak or wanting, not always incumbent; second or fourth toe frequently versatile.

CYPSELIDÆ (*SWIFTS*).

Bill very small, without notch, triangular, much broader than high, without bristles, but with minute feathers extending along under margin of nostrils, which are elongated, superior, and close together; anterior toes cleft to base, each with three joints, and covered with skin and feathers, lateral toes nearly equal to middle; tail-feathers ten; wings elongated, falcate.

Cypselus apus (Hirundo apus) SWIFT, II. 49

CAPRIMULGIDÆ (*GOATSUCKERS*).

Bill very short, gape enormously long and wide, opening to beneath or behind the eyes, smooth or armed with strong bristles; secondary quills, in some genera lengthened; toes connected by a movable skin, claw of middle toe pectinated.

Caprimulgus europœus, NIGHTJAR, III. 13

CUCULIDÆ (*CUCKOOS*).

Bill compressed, usually more or less lengthened, and with decurved culmen, bristles at gape few or absent, nostrils exposed without nasal tufts; tail long and soft, of eight to twelve feathers; toes in pairs, deeply cleft or not united, the outer anterior toe usually versatile, but directed rather laterally than backward.

Cuculus canorus (Cuculus hepaticus), CUCKOO, II. 29

ALCEDINIDÆ (*KINGFISHERS*).

Head large; bill long, strong, straight, and sub-pyramidal, usually longer than the head; wings short; legs small; outer and middle toes united for half their length.

Alcedo ispida, KINGFISHER, I. 121

PICIDÆ (*WOODPECKERS*).

Bill long, wedge-shaped; tongue capable of great protrusion; wings rounded, tail feathers ten or twelve, rigid or soft; outer toe turned backward permanently, not versatile laterally.

Dendrocopus major (Picus major), GREAT SPOTTED WOODPECKER, IV. 69

Gecinus viridis (Picus viridis), GREEN WOODPECKER, I. 117

Iynx torquilla (Yunx torquilla), WRYNECK, I. 69

COLUMBÆ.

Bill straight, compressed, horny at vaulted tip, which is separated by a constriction from the soft membranous basal portion; nostrils beneath a soft tumid valve; legs feathered to tarsus or beyond; hallux generally incumbent; front toes rarely joined by membrane at base.

COLUMBIDÆ (PIGEONS).

Bill always shorter than head; there is a long nasal groove, the posterior portion occupied by a cartilaginous scale, covered by a soft cere-like skin; the nostrils constitute an elongated slit in the lower border of the scale; wing large, lengthened, and pointed, with ten primaries; tail rounded or wedge-shaped; tarsus usually short, rarely longer than middle toe, scutellate in front, and with hexagonal plates at sides and behind.

Columba livia, Rock Dove, IV. 113
Columba œnas, Stock Dove, IV. 21
Columba palumbus, Ringdove, I. 65
Turtur communis (T. auritus, Columba turtur), Turtle Dove, IV. 85

GALLINÆ.

Bill generally short, stout, convex, with obtuse vaulted tip; nostrils scaled or feathered; legs usually feathered to tarsus or beyond, tarsus when not feathered generally broadly scutellate; hallux ordinarily elevated, anterior toes generally joined at base by a membrane, claws blunt, little curved; wings strong, short, and concavo-convex; tail-feathers commonly more than twelve.

TETRAONIDÆ (GROUSE).

Tarsus densely feathered; nostrils in fossa concealed by feathers; toes usually naked (feathered to claws in Lagopus), with pectinations of scales along the edges; tail-feathers sixteen, eighteen, or twenty; tail rounded, acute, or forked. Some genera with inflatable air-sac in neck.

Lagopus mutus (Tetrao lagopus, L. vulgaris), Ptarmigan, II. 89

Lagopus scoticus (Tetrao scoticus, T. lagopus), Common Grouse, I. 49

Tetrao urogallus, Capercaillie, III. 33

PHASIANIDÆ (PHEASANTS).

Bill moderate, vaulted, with tip of upper mandible produced; wings rounded, tail broad, mostly with fourteen or eighteen feathers; tarsus scutellated in front, in males mostly spurred; hallux inserted somewhat high, insistent on the point, the anterior toes conjoined at base by a small membrane; cheeks or lateral parts of head unplumed, or with tufts.

Caccabis rufa (Perdix rufa, P. rubra, Tetrao rufus), RED-LEGGED PARTRIDGE, IV. 129

Coturnix communis (Perdix coturnix, Tetrao coturnix), COMMON QUAIL, IV. 97

Perdix cinerea (Tetrao perdix), PARTRIDGE, II. 21

Phasianus colchicus, PHEASANT, II. 33

FULICARIÆ.

Tibia naked; neck and legs comparatively short; head completely feathered, or with a broad horny frontal plate; bill not constricted in the middle, rather shorter than head, straight and quite stout, or much longer, regularly slender and decurved, with long nasal fossæ; nostrils incompletely or not perforate; toes equalling or exceeding the tarsi in length, simple or lobate; wings short, rounded, concave, with ten primaries; tail rounded.

RALLIDÆ (RAILS).

Characters of the order.

Crex pratensis, LANDRAIL, III. 61

Fulica atra, COOT, II. 105

Gallinula chloropus (Fulica chloropus), MOORHEN, WATER-HEN, I. 125

Rallus aquaticus, WATER RAIL, II. 109

LIMICOLÆ.

Tibia bare of feathers for a variable (sometimes slight) distance above heel-joint; legs commonly lengthened, sometimes excessively so; neck usually produced in corresponding ratio; toes cleft, or united for a short distance by one or two small basal webs; hallux always reduced or wanting; wings generally lengthened, pointed, and flat, tail shorter than wing.

CHARADRIIDÆ (PLOVERS).

Bill short, weak at base, strong at tip; nostrils in deep longitudinal groove; hallux wanting, or small and set high.

Ægialitis cantiana (Charadrius cantianus), Kentish Plover, IV. 5

Charadrius pluvialis, Golden Plover, III. 57

Eudromias morinellus (Charadrius morinellus), Dotterel, IV. 117

Hæmatopus ostralegus, Oyster-catcher, IV. 101

Vanellus vulgaris (Tringa vanellus), Lapwing, I. 133

SCOLOPACIDÆ (*SNIPES*).

Bill long, slender, compressed and grooved at tip; nostrils in groove at base, closed by membrane; wings long and pointed; tarsus long and slender; hind toe short or absent.

Calidris arenaria (Charadrius callidris, Callidris arenaria), Sanderling, IV. 133

Gallinago cœlestis (Scolopax gallinago), Common Snipe, II. 57

Gallinago gallinula (Scolopax gallinula), Jack Snipe, II. 125

Machetes pugnax (Tringa pugnax), Ruff, III. 109

Numenius arquata (Scolopax arquata), Curlew, II. 97

Phalaropus fulicarius (P. lobatus), Grey Phalarope, III. 117

Scolopax rusticula (S. rusticola), Woodcock, II. 45

Totanus calidris (Scolopax calidris), Redshank, III. 77

Totanus hypoleucus (Tringa hypoleucus), Common Sandpiper, III. 101

Tringa alpina (T. cinclus), Dunlin, III. 49

Tringa minuta (T. pusilla), Little Stint, III. 85

GAVIÆ.

Bill pointed, knife-like or hooked; nostrils lateral; wings elongate and well-developed for flight; hallux free, anterior toes webbed.

LARIDÆ (*GULLS*).

Bill compressed, in some covered with an imperfect cere, tip of maxilla never strongly hooked, sometimes straight; nostrils lateral, perforate; wings long and pointed, tail long, tarsus scutellated in front, reticulated behind; hind toe mostly short.

Larus argentatus (L. fuscus), Herring Gull, III. 141

Larus canus, Common Gull, I. 113

Larus ridibundus, Black-headed Gull, II. 53

Stercorarius crepidatus (Lestris richardsonii, Larus parasiticus), Richardson's Skua, III. 69

TUBINARES.

Nostrils tubular; horny covering of bill consisting of several distinct pieces, separated by more or less marked grooves; terminal portion of bill produced into a strong hook; feet fully webbed anteriorly; hallux rudimentary, consisting of an elevated sessile, often minute, claw, sometimes wholly absent; wings usually very long.

PROCELLARIIDÆ (*PETRELS*).

Nasal tubes near together, laid side by side upon the culmen, the nostrils opening anteriorly; wings lengthened; hind toe present. though sometimes minute.

Procellaria pelagica, Storm Petrel, III. 17

PYGOPODES.

Legs inserted far back, tarsi extremely compressed; anterior toes fully webbed, or strongly lobed, with broad flat nails; bill extremely variable.

ALCIDÆ (*AUKS*).

Bill variable; anterior toes fully webbed and armed with strong claws, hallux entirely absent; lores feathered, tail always short; nostrils without overhanging membrane.

Alca torda, Razor-bill, IV. 141
Fratercula arctica, Puffin, II. 141
Mergulus alle (M. melanoleucos, Alca alle), Little Auk, IV. 125
Uria troile, Guillemot, IV. 109

PODICIPEDIDÆ (*GREBES*).

Bill variable in shape, but always elongate; nostrils variable, without overhanging lobe; wings very short and concave; tail rudimentary, consisting of a tuft of downy loose webbed feathers without perfectly-formed rectrices; toes lobate and semipalmate.

Podiceps fluviatilis (P. minor), Little Grebe, III. 29

STEGANOPODES.

Hallux united by web to inner toe; bill longer than head, with sharp cutting edges, and generally with a curved maxillary terminal hook; throat usually with a more or less distensible pouch of naked skin situated between the branches of the mandible.

PELECANIDÆ (*PELICANS*).

Bill long, broad at base, compressed, maxillary hook present or more or less distinctly indicated; face and throat partially feathered; nostrils very narrow; wings long, first quill longest; tarsi short and strong.

Phalacrocorax carbo (Pelecanus carbo), CORMORANT, IV. 77
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HERODIONES.

Tibiæ naked below; legs and neck much lengthened, in a corresponding ratio; toes long, slender, never coherent at base where cleft, or with movable basal webbing; hallux lengthened, free, perfectly incumbent, or but little elevated, with a large claw; wings commonly obtuse, but broad and ample; tail short.

ARDEIDÆ (*HERONS*).

Bill perfectly straight, tapering, acute; lores and orbit naked, occiput frequently with ornamental plumes; tarsus scutellate, middle claw pectinated; hallux lengthened, perfectly incumbent, with large claw.

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PLATALEIDÆ (*SPOONBILLS*).

Bill very broad, excessively depressed and greatly expanded terminally, much narrowed across the middle portion, extreme tip only much decurved.

Platalea leucorodia, SPOONBILL, II. 85.

ANSERES.

Bill straight, laminated or denticulate, usually terminated by a horny nail; legs short (always shorter than wing), tibiæ usually completely feathered, feet palmate, hallux well developed, though usually small, never absent; wings adapted for flying.

ANATIDÆ (*DUCKS*).

The only family. Characters of the order.

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